TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL RADAR INTERFACE EQUIPMENT MAINTENANCE RADAR INTEGRATION UNITS 1 AND 2

EXPANDED TROUBLESHOOTING (LOGIC DIAGRAMS)

GUIDED MISSILE AIR DEFENSE SYSTEM AN/TSQ-73

HEADQUARTERS, DEPARTMENT OF THE ARMY

4 APRIL 1985

Change

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FO-126 (Sheets 1 and 2)	FO-126 (Sheets 1 and 2)
FO-127 thru FO-130	FO-127 thru FO-130
FO-131 (Sheet 2)	FO-131 (Sheet 2)
FO-132	FO-132
FO-133 (Sheet 1)	FO-133 (Sheet 1)
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FO-139 and FO-140	FO-139 and FO-140
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FO-149	FO-149
FO-150 (Sheet 1)	FO-150 (Sheet 1)
FO-151 thru FO-160	FO-151 thru FO-160
FO-161 (Sheets 3 thru 5)	FO-161 (Sheets 3 thru 5)
FO-162 (Sheets 1 thru 4)	FO-162 (Sheets 1 thru 4)
FO-165	FO-165
FO-169	FO-169
FO-175	FO-175
FO-183	FO-183
FO-184 (Sheets 1, 2 and 4)	FO-184 (Sheets 1, 2 and 4)
FO-187	FO-187
FO-188 (Sheet 1)	FO-188 (Sheet 1)
FO-189	FO-189
FO-191 (Sheet 3)	FO-191 (Sheet 3)
FO-192 and FO-193	FO-192 and FO-193
FO-195 (Sheet 1)	FO-195 (Sheet 1)
FO-197 and FO-198	FO-197 and FO-198
FO-199 (Sheet 1)	FO-199 (Sheet 1)
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FO-126 (Sheet 2 of 3)	FO-126 (Sheet 2 of 3)
FO-129	FO-129
FO-130	FO-130
FO-131 (Sheet 1 of 2)	FO-131 (Sheet 1 of 2)
FO-131 (Sheet 2 of 2)	FO-131 (Sheet 2 of 2)
FO-134 (Sheet 2 of 2)	FO-134 (Sheet 2 of 2)
FO-135	FO-135
FO-136	FO-136
FO-137	FO-137
FO-140	FO-140
FO-150 (Sheet 1 of 2)	FO-150 (Sheet 1 of 2)
FO-157	FO-157
FO-160	FO-160
FO-181 (Sheet 1 of 2)	FO-181 (Sheet 1 of 2)
FO-181 (Sheet 2 of 2)	FO-181 (Sheet 2 of 2)
FO-182	FO-182
FO-183	FO-183
FO-184 (Sheet 1 of 4)	FO-184 (Sheet 1 of 4)
FO-184 (Sheet 2 of 4)	FO-184 (Sheet 2 of 4)
FO-184 (Sheet 3 of 4)	FO-184 (Sheet 3 of 4)
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GUIDED MISSILE AIR DEFENSE SYSTEM AN/TSQ-73

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Remove Pages
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WARNING

DANGEROUS VOLTAGE

is used in the operation of this equipment

DEATH ON CONTACT

may result if personnel fail to observe safety precautions

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technician is aided by operators, he must warn them about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment, after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body.

WARNING

Do not be misled by the term "low voltage". Potentials as low as 50 volts may cause death under adverse conditions.

For Artificial Respiration refer to FM 21-11.

EXTREMELY DANGEROUS POTENTIALS

greater than 500 volts exist in the following units:

Display console high voltage power supply

Display console CRT

WARNING

For emergencies requiring immediate shutdown of system power, press SYSTEM POWER OFF switch located on power cabinet power transfer unit. Observe that SYSTEM POWER ON indicator light goes off.

a/(b blank)

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Page No.	Change No.	Page No.	Change No.	Page No.	Change No.
a	0	FO-146	3	FO-179	0
b blank	_		3	FO-180	
A	3	FO-148	0	FO-181 (2 sheets)	2
B blank			3	FO-182	
i-iii	1	FO-150 (She	et 1)3	FO-183	
iv blank	1		et 2)0	FO-184 (Sheets 1 an	d 2)3
5-775 - 5-714			3	FO-184 (Sheet 3)	,
5-785	1		3	FO-184 (Sheet 4)	
5-786 - 5-787	2	FO-153	3	FO-185	
5-788 blank	2	FO-154	3	FO-180	0
FO-126 (Sheets	s 1 and 2)3	FO-155	3	FO-187	3
FO-126 (Sheet	3)0	FO-156	3	FO-188 (Sheet 1)	3
FO-127	•	FO-157	3	FO-188 (Sheet 2)	
FO-128	3	FO-158	3	FO-189	
FO-129	3	FO-159	3	FO-190	0
FO-130	3	FO-160	3	FO-191 (Sheets 1 an	d 2)0
FO-131 (Sheet	1)2	FO-161 (She	ets 1 and 2)0	FO-191 (Sheet 3)	3
FO-131 (Sheet	2)3	FO-161 (She	ets 3 thru 5) 3	FO-192	3
FO-132	3	FO-162 (4 sh	neets)3	FO-193	3
FO-133 (Sheet	1)3		0	FO-194	0
FO-133 (Sheet	2)0	FO-164	0	FO-195 (Sheet 1)	3
FO-134 (Sheet	1)3	FO-165	3	FO-195 (Sheet 2)	0
FO-134 (Sheet	2)2	FO-166	0	FO-196	0
FO-135	2	FO-167	1	FO-197	3
FO-136	2	FO-168	0	FO-198	3
FO-137	3	FO-169	3	FO-199 (Sheet 1)	3
FO-138	0		0	FO-199 (Sheets 2 an	d 3)0
FO-139	3	FO-171 (2 sh	neets)0	FO-200 (5 sheets)	3
FO-140	3	FO-172	3	FO-201	3
FO-141 (Sheet	1)0	FO-173	0	FO-202 (Sheet 1)	0
FO-141 (Sheet	2)3	FO-174	0	FO-202 (Sheet 2)	3
FO-142 (3 Shee	ets)0	FO-175	3	FO-203	3
FO-143	3	FO-176	1	FO-204	3
FO- 144	3	FO-177	0	FO-205 (2 sheets)	0
FO-145	3	FO-178	0	,	

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ORGANIZATIONAL MAINTENANCE MANUAL RADAR INTERFACE EQUIPMENT MAINTENANCE RADAR INTEGRATION UNITS 1 AND 2

EXPANDED TROUBLESHOOTING (LOGIC DIAGRAMS)

GUIDED MISSILE AIR DEFENSE SYSTEM

AN/TSQ-73

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TABLE OF CONTENTS

Chapter		Page
5	LIST OF ILLUSTRATIONSLIST OF TABLES	
	Section XV. RADAR INTEGRATION UNITS	
5-48	General	5-775
5-49	Logic Diagrams	5-775
5-50	Using Logic Diagrams	5-775

LIST OF ILLUSTRATIONS

Figure		Page
5-4	Radar Integration Unit 1A1A1A4 Bay 1, Component Location	5-775
5-5	Radar integration Unit 1A1A1A4 Bay 2, Component Location	5-776
FO-126	IOB Input Register and Interface Circuits Logic Diagram	
FO-127	IOB Function Commands Logic Diagram	
FO-128	IOB Parity Generation Checker Logic Diagram	
FO-129	IOB Command Control Logic Diagram	
FO-130	IOB Data Output Strobe Generator Logic Diagram	
FO-131	IOB Interrupt Register Logic Diagram	
FO-132	IOB I/O Logic Diagram	
FO-133	IOB OFR Data, Address and Clock Logic Diagram	
FO-134	IOB Devise Interrupt and Reset Control Logic Diagram	
FO-135	IOB Status 1 Error Register and Control Logic Diagram	
FO-136	IOB Status 2, 3 and 4 Error Register Logic Diagram	
FO-137	IOB Automatic Gate Multiplexer Logic Diagram	
FO-138	IOB Input/Output Data Multiplexer Logic Diagram	
FO-139	VDU Holding Registers Logic Diagram	
FO-140	VDU Special Video Select and IFF Decode Logic Diagram	
FO-141	VDU Video Selection and Decoding Logic Diagram	
FO-142	VDU Video Mixers Logic Diagram	
FO-143	RSU Special Clock Generator Logic Diagram	
FO-144	RSU Pretrigger/Range Zero Stretcher Logic Diagram	
FO-145	RSU Pretrigger Alignment Logic Diagram	
FO-146	RSU Range Zero/Range Max Decode Logic Diagram	
FO-147	RSU Variable Frequency Divider Logic Diagram	
FO-148	RSU Range Counter Logic Diagram	
FO-149	RSU Radar Clock Generator Logic Diagram	
FO-150	RSU TPS-32/ACM Clock Generator and Error Check Logic Diagram	
FO-151	TDU-A Timing Logic Diagram	
FO-152	TDU-B Timing Logic Diagram	
FO-153	TDU MTI and Matrix Logic Diagram	
FO-154	TDU-A Write Register Logic Diagram	
FO-155	TDU-B Write Register Logic Diagram	
FO-156	TDU RAM Address Counter Logic Diagram	
FO-157	TDU-A RAM Clip Selection Logic Diagram	
FO-158	TDU-B RAM Clip Selection Logic Diagram	
FO-159	TDU-B RAM Addressing and Clear Logic Diagram	
FO-160	TDU PROM Logic Diagram	
FO-161	TDU Channel A RAM Logic Diagram	
FO-162	TDU Channel B RAM Logic Diagram	
FO-163	TDU-A Start/Stop Comparators Logic Diagram	
FO-164	TDU-B Start/Stop Comparators Logic Diagram	
FO-165	TDU BITE Register Logic Diagram	
FO-166	SDC Interface Logic Diagram	
FO-167	SDC Clock Generator Circuit Logic Diagram	
FO-168	SDC Phase Logic Diagram	
FO-169	SDC ANP/ACP Select Logic Diagram	

LIST OF ILLUSTRATIONS (Continued)

Figure	
FO-170	SDC Frequency Doubler Logic Diagram
FO-171	SDC BAMS Counter and Adder Logic Diagram
FO-172	SDC ANP/ACP Logic Diagram
FO-173	SDC Angle Mark Generator Logic Diagram
FO-174	SDC Memory Address and Enable Logic Diagram
FO-175	SDC BAMS Memory Logic Diagram
FO-176	SDC Sine/Cosine Select Logic Diagram
FO-177	SDC Sine Add/Subtract Logic Diagram
FO-178	SDC Cosine Add/Subtract Logic Diagram
FO-179	SDC Sine/Cosine Serial Output Logic Diagram
FO-180	SDC BITE Register Logic Diagram
FO-181	DIU Radar Simulator Data Selection and Control Logic Diagram
FO-182	DIU Module-26 Counter Logic Diagram
FO-183	DIU Data Receive Detector Logic Diagram
FO-184	DIU Data Registers Logic Diagram
FO-185	IIU Clock and Initialization Logic Diagram
FO-186	IIU Range and Azimuth Compare Logic Diagram
FO-187	IIU Mode Sequence and Gating Logic Diagram
FO-188	IIU Adjustable Precision Time Delay Logic Diagram
FO-189	IIU IFF Interface Circuit Logic Diagram
FO-190	IIU Video Quantizer Logic Diagram
FO-191	IIU Delay Lines Logic Diagram
FO-192	IIU Emergency Decoders Logic Diagram
FO-193	IIU Before and After Density PROM Logic Diagram
FO-194	IIU Mode 4 Density Logic and Test Gate Generator Logic Diagram
FO-195	IIU IFF Input Queue Logic Diagram
FO-196	IIU IFF Range Comparator Logic Diagram
FO-197	IIU Radar Range Comparator Logic Diagram
FO-198	IIU Range and History Correlator Logic Diagram
FO-199	IIU Memory Control Logic Diagram
FO-200	IIU Target Start RAM Logic Diagram
FO-201	IIU IFF Output Queue Logic Diagram
FO-202	IIU Pulse Generator Logic Diagram
FO-203	IIU Radar Output Queue Logic Diagram
FO-204	IIU Input/Output Control Logic Diagram
FO-205	IIU BITE Register and Control Logic Diagram
Table	LIST OF TABLES
F 20	Dodov Intogration Unit 4.4.4.4.4.4. Circuit Cord Location
5-39 5-40	Radar Integration Unit 1A1A1A4, Circuit Card Location
J-4U	Caiu fiii iu tesi fuiil Cuitelaliuit

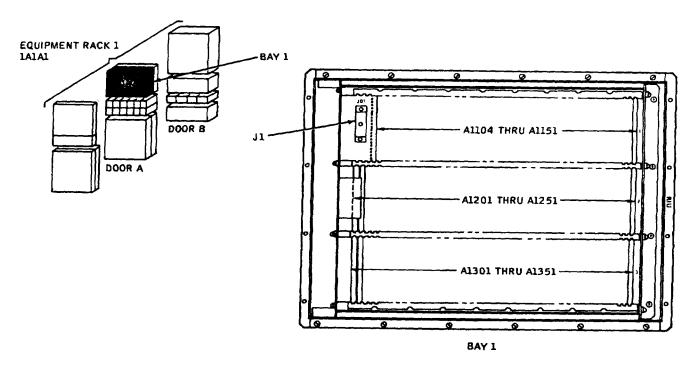
SECTION XV. RADAR INTEGRATION UNITS

5-48. General. This manual is Volume 5 of TM 9-1430-655-20-3, Radar Interface Equipment Maintenance for Guided Missile Air Defense System AN/TSQ-73. It contains the logic diagrams covering radar integration units (RIU) 1 and 2 for use and guidance of advanced personnel responsible for repair of the RIE. Foldouts 126 through 165 cover RIU 1 and foldouts 166 through 205 cover RIU 2. RIU 1 and 2 are located in equipment rack 1, 1A1A1, door A, in two card cage bays. Figure 5-4 illustrates bay 1 and figure 5-5 illustrates bay 2.

5-49. Logic Diagrams. Logic diagrams provide the maintenance technician pin to pin signal flow, traceable by signal mnemonics and I/O tables, to help identify faulty cards and to troubleshoot faults in the backplane

wiring and other areas that are beyond fault isolation capabilities of the MTS.

5-50. Using Logic Diagrams. Logic diagrams in this manual show signal flow in functional subsystems of RIU 1 and 2. Signal flow is traceable between circuit card pin numbers and is shown as inputs and outputs of integrated circuit logic devices on the circuit card. A specific signal can be followed between foldouts by using the signal mnemonic and the logic diagram input/output table. The circuit card slot is shown within the integrated circuit card device symbol. Table 5-39 contains the circuit card slot and the part number of the card. Table 5-40 contains, by card part number, the test point for each of the 80 pins of MTS testable cards.



MS 197185

Figure 5-4. Radar Integration Unit 1A1A1A4 Bay 1, Component Location

Change 1 5-775

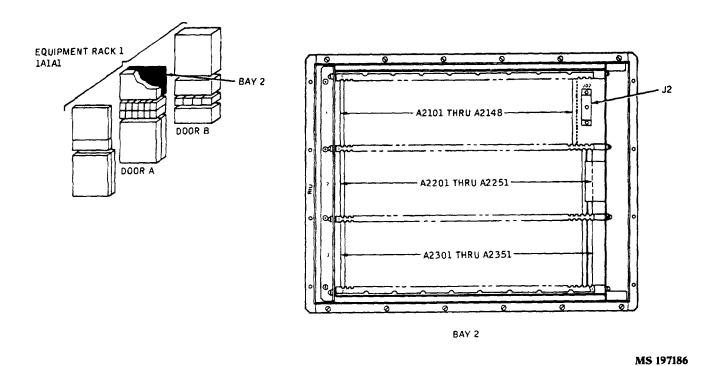


Figure 5-5. Radar Integration Unit 1A1A1A4 Bay 2, Component Location

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location

0			Color code			
Card slot	Part number	Card type	1	2	3	4
<u> </u>	1 dit fidifibor	Gara type	•			· · ·
		BAY 1-SHELF 1				
A1101	-	-	-	-	-	-
A1102	-	-	-	-	-	-
A1102	-	-	-	-	-	-
A1103	-					
A1104	W308	Connector	-	-	-	-
A1105	W309	Connector	-	-	-	-
A1106	W528	Connector	-	-	-	-
A1107	W529	Connector	-	-	-	-
A108	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A109	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A110	587104-102	Dual 4-input NAND gate	-	_	Yellow	_
A111	587102-102	Quad 2-input NAND gate	-	_	Red	_
A1112	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1113	587100-102	4/8 MHz oscillator	-	-	-	-
A1114	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1115	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1116	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1117	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1118	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1119	587102-102	Quad 2-input NAND gate	-	-	-	Red
A1120	587102-102	Quad 2-input NAND gate	_	_	_	Red
A1121	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1122	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1123	587119-100	240-ohm resistor	-	-	-	-
A1124	587108-102	Single 8-input NAND gate	_	_	Gray	-
A11251	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Black
A1126	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A1127	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A1128	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1129	587102-102	Quad 2-input NAND gate	_	_	Red	_
A1130	587102-102	Quad 2-input NAND gate	_	_	Red	_
A1131	587102-102	Quad 2-input NAND gate	_	_	Red	_
A11321	587104-102	Dual 4-input NAND gate	_	_	Yellow	_
A1133	587102-102	Quad 2-input NAND gate	_	_	Red	_
A1134	587102-102	Quad 2-input NAND gate	_	_	Red	_
	it end of table.	add 2 mpat 17 mb gate			1100	

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

Cord		Color code				
Card slot	Part number	Card type	1	2	3	4
		•				
A1135	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1136	587106-102	Quad 2-input lamp driver	-	-	Blue	-
A1137	587106-102	Quad 2-input lamp driver	-	-	Blue	-
A1138	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1139	587119-100	240-ohm resistor	-	-	-	-
A1140 ¹	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1141 ¹	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1142	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1143 ¹	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1144	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1145	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1146	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1147	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1148	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1149	587119-100	240-ohm resistor	-	-	-	-
A1150	-	-	-	-	-	-
A1151	10283505	Test set interface	Orange	Green	Black	Green
		BAY 1-SHELF 2				
A1201	W320	Connector	-	-	-	-
A1202	W317	Connector	-	-	-	-
A1203	W318	Connector	-	-	-	-
A1204	W319	Connector	-	-	-	-
A1205	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1206	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1207	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Blue
A1208	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1209	587104-102	Dual 4-input NAND gate		-	Yellow	-
A1210	587117-102	Hex inverter	Brown	-	Violet	-
A1211	-	-	-	-	-	-
A1212	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1213	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1214	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1215	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1216	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1217	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red

See footnote at end of table.

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

				Color	code	
Card	D ()	0. 14	4	•	•	
slot	Part number	Card type	1	2	3	4
A1218	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1219	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1220	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1221	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A1222	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1223	587117-102	Hex inverter	Brown	-	Violet	-
A1224	587108-102	Single 8-input NAND gate	-	-	Gray	-
A1225	-	-			•	-
A1226	-	-	-	-	-	-
A1227	587119-100	240-ohm resistor	-	-	-	-
A1228	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A1229	-	·	-	-	-	-
A1230	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1231	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1232	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Black
A1233	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1234	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1235	587117-102	Hex inverter	Brown	-	Violet	-
A1236	-	-	-	-	-	-
A1237	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1238	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1239	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1240	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1241	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1242	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1243	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1244	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1245	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1246	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A1247	587102-102	Quad 2-input NAND gate	-	Red	-	-
A1248	587117-102	Hex inverter	Brown	_	Violet	-
A1249	-	-	-	-	-	-
A1250	-	-	-	-	-	-
A1251	-	-	-	-	-	-

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

0			Color code			
Card slot	Part number	Card type	1	2	3	4
		BAY 1-SHELF 3				
A1301	W531	Connector				
A1302	W348	Connector	-	-	-	-
A1303	W349	Connector	-	-	-	-
A1303	587107-102	AC-coupled I/O	-	-	- Violet	-
A1305	587107-102	AC-coupled I/O AC-coupled I/O	-	-	Violet	-
A1305	587107-102	AC-coupled I/O AC-coupled I/O	-	-	Violet	-
A1300	587107-102	AC-coupled I/O AC-coupled I/O	-	-	Violet	-
A1307	587107-102	AC-coupled I/O AC-coupled I/O	-	-	Violet	-
A1309	587107-102	AC-coupled I/O	-	_	Violet	-
A1310	687107-102	AC-coupled I/O AC-coupled I/O	-	-	Violet	-
A1311	587102-102	Quad 2-input I/O	-	-	Red	-
A1312	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A1313	587104-102	Dual 4-input NAND gate Dual 4-input NAND gate	_	_	Yellow	_
A1314	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1315	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1316	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A1317	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1318	587102-102	Quad 2-input NAND gate	_	_	Red	_
A1319	587104-102	Dual 4-input NAND gate	_	_	Yellow	_
A1320	587108-102	Single 8-input NAND gate	_	_	Gray	_
A1321	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A1322	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A1323	587102-102	Quad 2-input NAND gate	-	-	Red	-
A1324	587102-102	Quad 2-input NAND gate	_	_	Red	_
A1325	587104-102	Dual 4-input NAND gate	_	_	Yellow	_
A1326	587108-102	Single 8-input NAND gate	_	_	Gray	_
A1327	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1328	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1329	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1330	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A1331	-	-	-	-	-	-
A1332	587104-102	Dual 4-input NAND gate	_	_	Yellow	_
A1333	587104-102	Dual 4-input NAND gate	_	-	Yellow	-
A1334	587108-102	Single 8-input NAND gate	-	-	Gray	-
	3330 102	5g. 5pat 11, 11 2 gato			,	

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

-Continued Color code							
			Color (code			
Part number	Card type	1	2	3	4		
	21						
587108-102	Single 8-input NAND gate	-	-	Gray	_		
587102-102	Quad 2-input NAND gate	-	-	Red	-		
587102-102	Quad 2-input NAND gate	-	-	Red	-		
587102-102	Quad 2-input NAND gate	-	-	Red	-		
587102-102	Quad 2-input NAND gate	-	-	Red	-		
10281606	Hex 4-bit shift register	Brown	Blue	Black	-		
587104-102	Dual 4-input NAND gate	-	-	Yellow	-		
587104-102	Dual 4-input NAND gate	-	-	Yellow	-		
587102-102	Quad 2-input NAND gate	-	-	Red	-		
587108-102		-	-	Gray	-		
587102-102	Quad 2-input NAND gate	-	-	Reď	-		
587102-102	Quad 2-input NAND gate	-	-	Red	-		
-	-	-	-	-	-		
-	-	-	_	-	-		
-	-	-	-	-	-		
-	-	-	-	-	-		
-	-	-	-	-	-		
	BAY 2-SHELF 1						
10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue		
		-	_	Red	-		
		Brown	Blue	Green	Red		
10281603		Brown	Blue	Black	Orange		
10281603	• • • • • • • • • • • • • • • • • • •	Brown	Blue	Black	Orange		
587104-102		-	_	Yellow	-		
10281652		Brown	Blue	Green	Red		
10281602		Brown	Blue	Black	Red		
		Brown			Red		
		Brown		Green	Red		
		-			Red		
		Brown	Blue	Green	Red		
	·		-	Violet	-		
		-	-	Yellow	-		
		Brown	Blue	Black	Blue		
					-		
587104-102	Dual 4-input NAND gate	_	_	Yellow	_		
	587102-102 587102-102 587102-102 10281606 587104-102 587102-102 587102-102 587102-102 587102-102 	587108-102 Single 8-input NAND gate 587102-102 Quad 2-input NAND gate 10281606 Hex 4-bit shift register 587104-102 Dual 4-input NAND gate 587104-102 Dual 4-input NAND gate 587104-102 Dual 4-input NAND gate 587102-102 Quad 2-input NAND gate	587108-102	Part number Card type 1 2	Part number Card type 1 2 3		

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

		-Continued		Color c	ode	
Card						
slot	Part number	Card type	1	2	3	4
A2118	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2119	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2120	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2121	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2122	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2123	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2124	10281606	Hex 4-bit shift register	Brown	Black	Black	Blue
A2125	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2126	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2127	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2128	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2129	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2130	10281602	Counter/decoder	Brown	Blue	Black	Red
A2131	587108-102	Single 8-input NAND gate	-	-	Gray	-
A2132	10281602	Counter/decoder	Brown	Blue	Black	Red
A2133	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2134	10281602	Counter/decoder	Brown	Blue	Black	Red
A2135	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Black
A2136	587117-102	Hex inverter	Brown	-	Violet	-
A2137	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2138	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2139	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2140	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2141	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2142	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2143	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Black
A2144	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2145	W305	Connector	-	-	-	-
A2146	W304	Connector	-	-	-	-
A2147	W306	Connector	-	-	-	-
A2148	W307	Connector	-	-	-	-
A2149		-		-	-	_
A2150		-	-	-	-	_
A2151		-		-	-	_
A2201	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
· - • ·						

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

				Color c	ode	
Card						
slot	Part number	Card type	1	2	3	4
			_			
A2202	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2203	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2204	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2205	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2206	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2207	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2208	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2209	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2210	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2211	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2212	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2213	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2214	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2215		-	-	-	-	-
A2216	10281787	11.03 MHz oscillator	Brown	Violet	Gray	Violet
A2217	587119-100	240-ohm resistor	-	-	-	-
A2218 ¹	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2219	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2220	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2221	587117-102	Hex inverter	Brown	-	Violet	-
A2222	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2223	10281602	Counter/decoder	Brown	Blue	Black	Red
A2224	10281602	Counter/decoder	Brown	Blue	Black	Red
A2225	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Black
A2226	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2227 ¹	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2228 ¹	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2229	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2230	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2231	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2232	-	-	-	-	-	-
A2233	10281610	Hex 4-bit comparator	Brown	Blue	Brown	Black
A2234	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2235	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2236	587108-102	Single 8-input NAND gate	_	-	Gray	-

See footnote at end of table.

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

Cand				Color	code	
Card slot	Part number	Card type	1	2	3	4
A2237	10281602	Counter/decoder	Brown	Blue	Black	Red
A2238	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A2239	10281603	4-bit multiplexer	Brown	Blue	Black	Orange
A2240	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2241	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2242	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2243	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2244	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2245	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2246	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2247	W314	Connector	-	-	-	-
A2248	W313	Connector	-	-	-	-
A2249	W315	Connector	-	-	-	-
A2250	W316	Connector	-	-	-	-
A2251	W320	Connector	-	-	-	-
		BAY 2-SHELF 3				
A2301	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2302	587104-102	Dual 4-input NAND gate	-	-	Yellow	-
A2303	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2304	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2305	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2306	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2307	587102-102	Quad 2-input NAND gate	-	-	Red	-
A2308	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A2309	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue
A2310	587104-102	Dual 4-input NAND gate	-	_	Yellow	-
A2311	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red
A2312	587102-102	Quad 2-input NAND gate	-	_	Red	-
A2313	10281609	Quint 4-bit adder	Brown	Blue	Black	White
A2314	587102-102	Quad 2-input NAND gate	-	Red	-	-
A2315	587108-102	Single 8-input NAND gate		-	Gray	_
A2316	587104-102	Dual 4-input NAND gate		-	Yellow	-
A2317	587117-102	Hex inverter	Brown	_	Violet	_
A2318	587102-102	Quad 2-input NAND gate	2.0	_	Red	_
A2319	10281602	Counter/decoder	Brown	Blue	Black	Red
0.0	10201002	334110174300401	DIOWII	5.00	Diadik	1.00

Table 5-39. Radar Integration Unit 1A1A1A4, Circuit Card Location -Continued

			Color code					
Card	D	0 1			•			
slot	Part number	Card type	1	2	3	4		
A2320	10281602	Counter/decoder	Brown	Blue	Black	Red		
A2321	10281602	Counter/decoder	Brown	Blue	Black	Red		
A2322	10281780	Quad exclusive OR gate	Brown	Violet	Gray	Black		
A2323	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue		
A2324	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue		
A2325	587117-102	Hex inverter	Brown	-	Violet	-		
A2326	587102-102	Quad 2-input NAND gate	-	-	Red	-		
A2327	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue		
A2328	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue		
A2329	10281606	Hex 4-bit shift register	Brown	Blue	Black	Blue		
A2330	587104-102	Dual 4-input NAND gate	-	-	Yellow	-		
A2331	587104-102	Dual 4-input NAND gate	-	-	Yellow	-		
A2332	587119-100	240-ohm resistor	-	-	-	-		
A2333	10281602	Counter/decoder	Brown	Blue	Black	Red		
A2334	587117-102	Hex inverter	Brown	-	Violet	-		
A2335	587102-102	Quad 2-input NAND gate	-	-	Red	-		
A2336	10281780	Quad exclusive OR gate	Brown	Violet	Gray	Black		
A2337	10281602	Counter/decoder	Brown	Blue	Black	Red		
A2338	10281652	3-input J-K flip-flop	Brown	Blue	Green	Red		
A2339	587108-102	Single 8-input NAND gate	-	-	Gray	-		
A2340	10281609	Quint 4-bit adder	Brown	Blue	Black	White		
A2341	587102-102	Quad 2-input NAND gate	-	-	Red	-		
A2342	587102-102	Quad 2-input NAND gate	-		Red	-		
A2343	10281609	Quint 4-bit adder	Brown	Blue	Black	White		
A2344	10281780	Quad exclusive OR gate	Brown	Violet	Gray	Black		
A2345	587102-102	Quad 2-input NAND gate	-	-	Reď	-		
A2346	587102-102	Quad 2-input NAND gate	-	-	Red	-		
A2347	W345	Connector	-	-	-	-		
A2348	W530	Connector	-	-	-	-		
A2349	W346	Connector	_	-	-	-		
A2350	W347	Connector	_	-	-	-		
A2351	W358	Connector	-	-	_	_		

¹ Card Retainers are marked white indicating that the card must be removed from the cabinet and installed in the MTS for testing.

Table 5-40. Card Pin to Test Point Correlation

-	Ca	rd Type 587	7XXX ¹				Card typ	e 10281XX	X	
		• •				606				
	101				602	610				
	to				603	652				2
Pin	110	107	117	124	643 ²	780	601	609	629	645 ²
1	2B	2A	2B	5A		2B			3B	2B
2 3 4	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND
3	2A	3A	3A	6A	2B	3B	2B	2B	3A	
4	4A	_	2A		2A	2A	2A	2A	2B	4A
5 6	3B	4B	3B		3B	4B	3B	3B	4A	3B
6	5A	5A	14A	3A	3A	3A	3A	4B	5A	
7	3A	5B	4B		4B	5B	4B	4B	6B	3A
8	6A	8B	4A	12A	4A	4A	4A	4A	6A	6A
9	4B	10B	5B	7A	5B	6B	5B	5B	2A	4B
10	7A	9B	6B	13A	5A	5A	5A	5A	7A	7A
11	5B	11B	7A	_,,	6B	7B	6B	6B	5A	5B
12	+5V	+5V	+5V	+5V	+5V	+5V	+5V	+5v	+5V	+5V
13	6B		6A		7A	7A	7A	7A		6B
14	9A		8B		6A	6A	6A	6A		9A
15	7B	0115	7B	0115	7B	8B	7B	7B	5B	0115
16	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND
17	8B		9B	25A	8B	9B	8B	8B	17A	404
18	10A		9A	18A	9A	9A	9A	9A	8B	10A
19	9B		10B	24A	9B	10B	9B	9B	15B	9B
20	11A		10A	19A	10A	10A	10A	10A	15A	11A
21	10B		11B	26A	10B	11B	10B	10B	400	10B
22	12A		14A	2B	11A	11A	11A	11A	12B	12A
23	11B		12A		11B	12B	11B	11B		11B
24	13A		13A		12A	12A	12A	12A		13A
25	12B		11A	0.D	12B	14A	12B	12B	404	12B
26	14A		12B	3B	13A	13A	13A	13A	16A	14A
27	13B	. 5\/	13B	. 5\/	14A	13B	14A	14A	. 5) /	. 5\/
28	+5V	+5V	+5V	+5V	+5V	+5V	+5V	+5V	+5V	+5V
29	14B		15B 14B	10A	13B	14B	13B	13B	121	151
30 31	15A 15B		14B 16B		15A 14B	15A 15B	15A 14B	16A	13A	15A 15B
32	GND	GND	GND	GND	GND	GND	GND	15A GND	GND	GND
32 33	16B	17B	9A	16A	16B	16A	14B	18B	16B	GND
33 34	16A	17B 12B	9A 15A	15A	15B	16A	14B 15B	15B	16B 14B	16A
3 4 35	17B	126	13A	ISA	16B	17B	16B	16B	14B 19B	17B
36	17B 17A	13B	16A	16A	17A	17B 17A	17A	17A	19B	17B 17A
37	17A 18B	13B 17A	22A	17B	17A 18B	17B	17B	22B	18B	IIA
38	18A	6B	20A	170	18A	17B 18A	17B	18A	20A	18A
39	19B	טט	19B	21A	15B	19B	18B	18B	24B	10/
39 40	19B 19A	7B	190	19A	19A	19B 19A	19A	19A	31A	19A
41	22B	טו	23B	13/1	19B	22B	19B	19B	26B	13/1
42	20A	23B	200		20A	20A	20A	20A	23B	20A
43	23B	23B 24B			22B	23B	20A 22B	20A 22B	23B 23B	23B
43 44	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND
77	CIND	CIND	שויוט	OND	ן טויט	CIND	CIND	CIND	CIND	CIND

See footnotes at end of table.

Table 5-40. Card Pin to Test Point Correlation-Continued

	Ca	rd Type 587	7XXX ¹				Card typ	oe 10281XX	(X	
						606				
	101				602	610				
	to				603	652				
Pin	110	107	117	124	643 ²	780	601	609	629	645 ²
45	24B		25B		23B	24B	23B	23B		24B
46	21A		23B		21A	21A	21A	21A	25B	21A
47	25B		24A		23A	25B	23A	23A		25B
48	22A		21A		22A	22A	22A	22A	31B	22A
49	26B		23A		24B	26B	24A	24B		26B
50	23A		22A		24A	23A		24A	28A	23A
51	27B		27B		25B	27B	25B	25A		
52	24A		26A	20A	25A	24A	26B	25B	29B	24A
53	28B		26B		26B	28B	26A			26A
54	25A		25A		26A	25A	27B	26B		26A
55	29B		29B		27B	29B	28B	28B		29B
56	26A		28B		28B	26A	28A	27B		26A
57	30B		30B		29B	28A	29B	29B		30B
58	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND
59	31B		31B		30B	30B	30B	30B		31B
60	28A		28A		28A	29A	29A	28A		28A
61	32B		31A		31B	31B	31B	31B		32B
62	29A		29A		29A	30A	30A	29A	32A	29A
63	33B		30A		31A	32B				31A
64	30A		33A		30A	31A	31A	30A		30A
65	34B		33B		33B		33B			
66	31A		32A		32B	32A	33A	32B	31A	
67	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND
68	32A		32B		33A	33A	34A	32A		32A
69	35A		35B		32A	34B	33B	33B	32B	35A
70	33A		34B		34A	34A	35A	33A	34B	33A
71	36A		36B		33B	35B	34B	34B	36B	36A
72	34A		34A		35A	35A	36A	34A	35B	34A
73	36B		37B		34B	36B	35B	35B	38B	36B
74	35B		35A		36A	36A	26A	25A	33A	35B
75	36B		39A		35B	36B	36B	36B	38A	37B
76	37A		37A		37A	37A	36A	36A	37B	37A
77	35B		38A		36B	38B	37B	37B		38B
78	33A		36A		39A	38A		37A	34A	38A
79	39B		39B		37B	39B	38B	38B	39B	39B
80	39A		38B		38B	39A		38A		

¹10283XXX card types have identical IC/test point/card pin correlation as 587XXX card types as follows:

¹⁰²⁸³⁶²⁶ is same as 587102

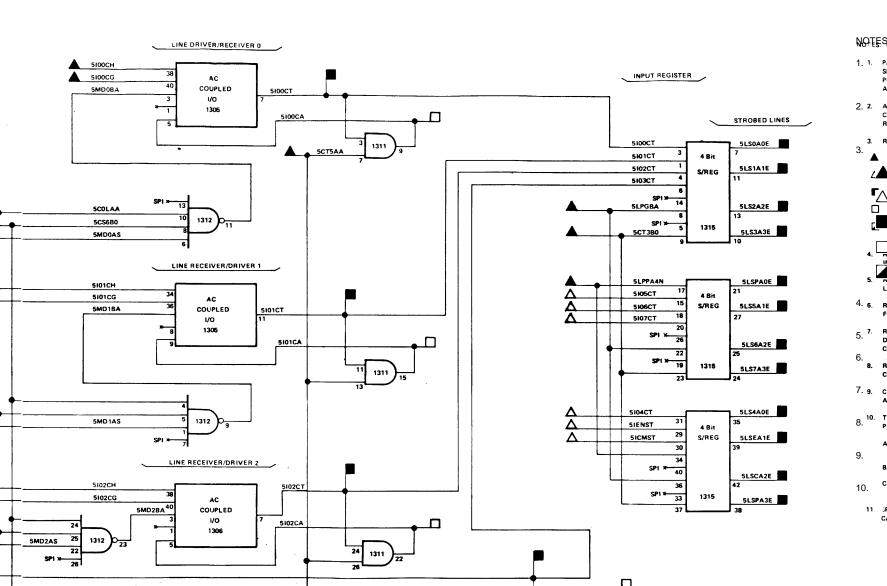
¹⁰²⁸³⁶²⁷ is same as 587108

¹⁰²⁸³⁶²⁸ is same as 587103

¹⁰²⁸³⁶²⁹ is same as 587106

¹⁰²⁸³⁶³⁰ is same as 587107

²10283XXX



Change 3 FO-126. IOB Register and Interface Circuits Logic Diagram (Sheet 1 of 3)

007937

5 L S C A 2 E

5LSEA1E 5LSPA0E 5LSPA3E

5LSOA0E

5LS1A1E

5LS2A2E 5LS3A3E

5LS4AOE

5LS5A1E 5LS6A2E

12700, 12900

12700, 12900

13400 12700, 13400 12700, 13400 12700, 13400 12700, 13400 12700, 13400 12700, 13400

LINE RECEIVER/DRIVER 3

COUPLED

1/0

1306

5103CG

12700

13400

12800, 13301, 13302 12800, 13301, 13302 12800, 13301, 13302 12800, 13301, 13302

DESTINATION

FO-SH

INPUT

SOURIE

F 0 - 3 H

12800

12800 13400

26802 27001 26803

31702

26803 31702

26803 31702

26803 31702

26803

26803

31702 26803

31702

26803

31702 12800

12800

13800

13800

13800

SIGNAL

5 C T 3 B O

5 C T 5 A A

5 C O L A A

5 C O L A A

JCOLAA

5100cG

5100CG

5 I O O C H

5 I O O C H

5101CG 5101CG 5101CH 5101CH 5102CG 5102CG

5102CH 5102CH 5103CG 5103CG 5103CH

51031H

5LPGBA 5LPP=4N

SAOGME

5MD2AS

TM 9-1430-655-20-3-5

NOTES; INLESS OF SERVICE SPECIFIED

- 1. 1. PARPARTHALE FREGERINGETIONS ARE SHOWN: FOR PREFIX WITH APPLICABLE UNIT PREFIX WITH APPLICABLE UNIT ASSEMBLY DESIGNATION.
- 2. 2. ALALIROURS SHOWN SHOWN SHOWN THANSE FIGURE ARE CONTINUED HIM TO THE RICK 1.

 RICK 10 BACO 10 CARD CARD (1414144)
- 3. REFERENCES ARE AS FOLLOWS:
 REFERENCES ARE AS FOLLOWS:
 INDICATES INPUT FROM ANOTHER FIGURE.
- INDICATES WHITE BOW AND THER FIGURE
- INDIPATES ATTESTINE OF THE INTITUTE SAME FIGURE
- ☐ INDICATES OUTPUT TO THE SAME FIGURE.
- INDICATES OUTPUT TO ANOTHER FIGURE INDICATES OUTPUT TO THE SAME AND
- ANOTHER FIGURE.
 INDICATES OUTPUT TO THE SAME FIGURE

- ANOTHER FIGURE.
 INDICATES OUTPUT TO THE SAIVIE FIGURE

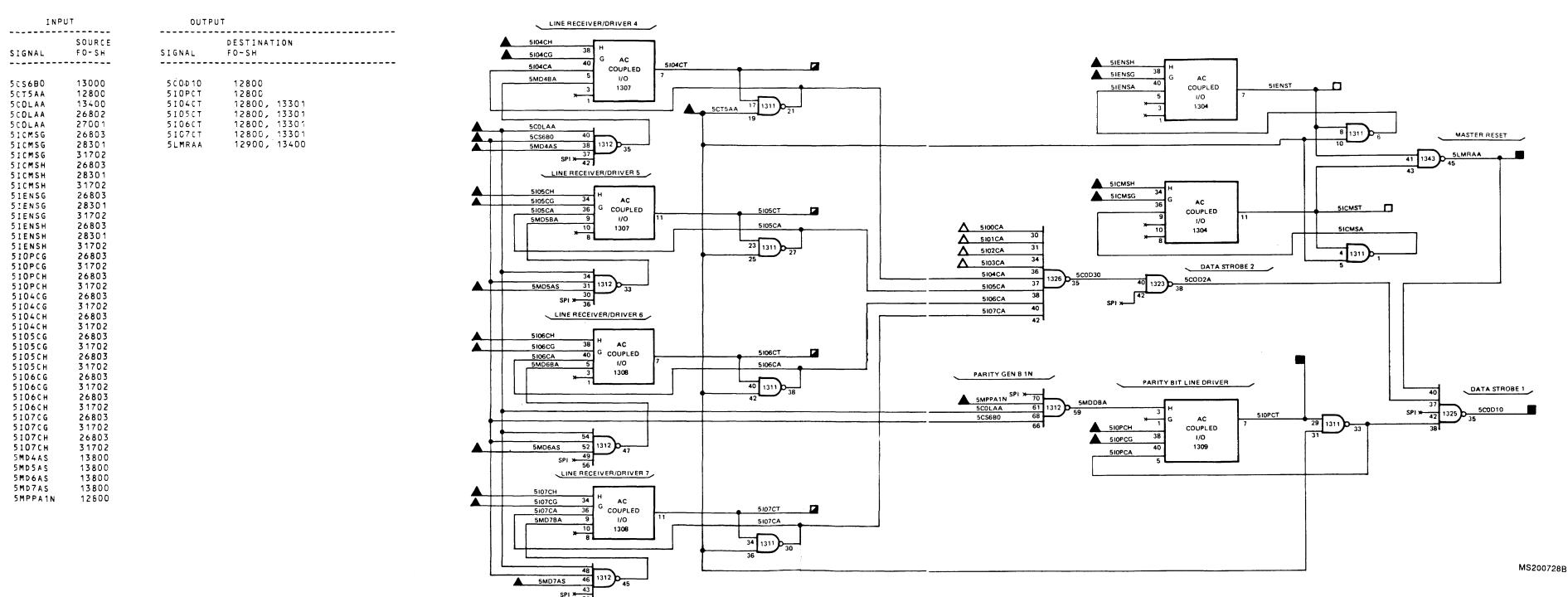
 INDICATES OUTPUT TO THE SAME AND
 INDICATES OUTPUT TO THE SAME AND

 INDICATES OUTPUT TO THE SAME AND

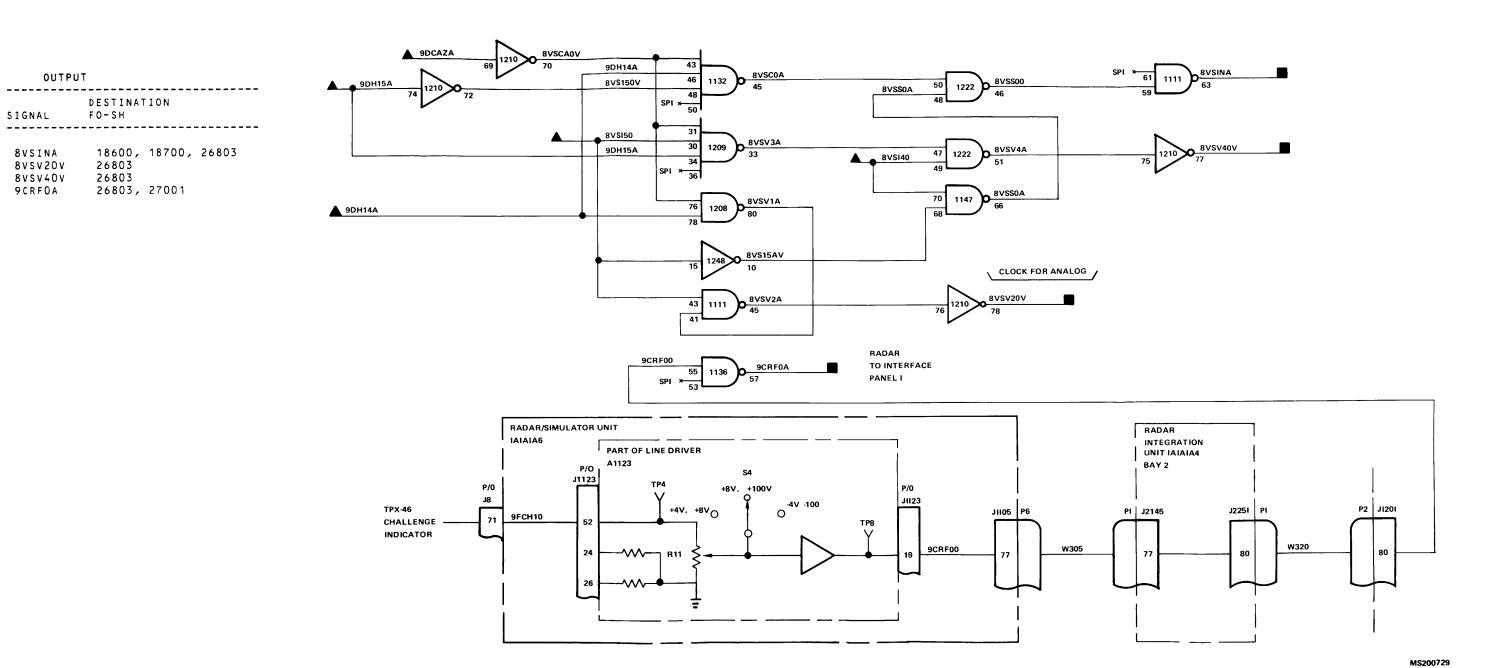
 INDICATES OUTPUT TO THE SAME AND

 ORK UP LISTING. 4. 6. REPERFERENTIAL TABLET AND SECTION RILL CARD LOCATION IN LOGIC
- REFER TO RIE ROWER INSTRUBUTION YOU SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT
- 8. RESERTANCE TANNING CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 7. 9. CHREFTERMEGOS THE LEGINEFICHSTIBLIBUTION DIAGRAMS FOR DC AND CHARLES AND CONCERN AND
- 8. 10. TO DETERMINE CIRCULT CARD PARTIES FOR CHICARD CHIP FUNCTION DESIGNATIONS.
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION
- CHRCURGUIS PARECUS VINCETUDE CARD LOCATION AND CIRCUIT
- B. GERR HINANLINGEROR CARD PART NUMBER
- C. REFERENCE POINT PERFORM THE FOLLOWING:
- 11. PIXXX INDICATES +5V PULLUP THROUGH RESISTOR
- CAPAPS A1123 FAR 1039 A 10 IRROUNT AS 227 BOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

TM 9-1430-655-20-3-5



Change 3 FO-126. IOB Input Register and Interface Circuits Logic Diagram (Sheet 2 of 3)



FO-126. IOB Input Register and Interface Circuits Logic Diagram (Sheet 3 of 3)

INPUT

SIGNAL

8 V S I 4 O 8 V S I 4 O 8 V S I 5 O 8 V S I 5 O 9 D C A Z A 9 D C A Z A

9DH14A 9DH14A

9DH15A 9 D H 1 5 A SOURCE

FO-SH

14000 26901

14000 26901

18700

26803

OUTPUT

SIGNAL

8 V S I N A 8 V S V 2 O V

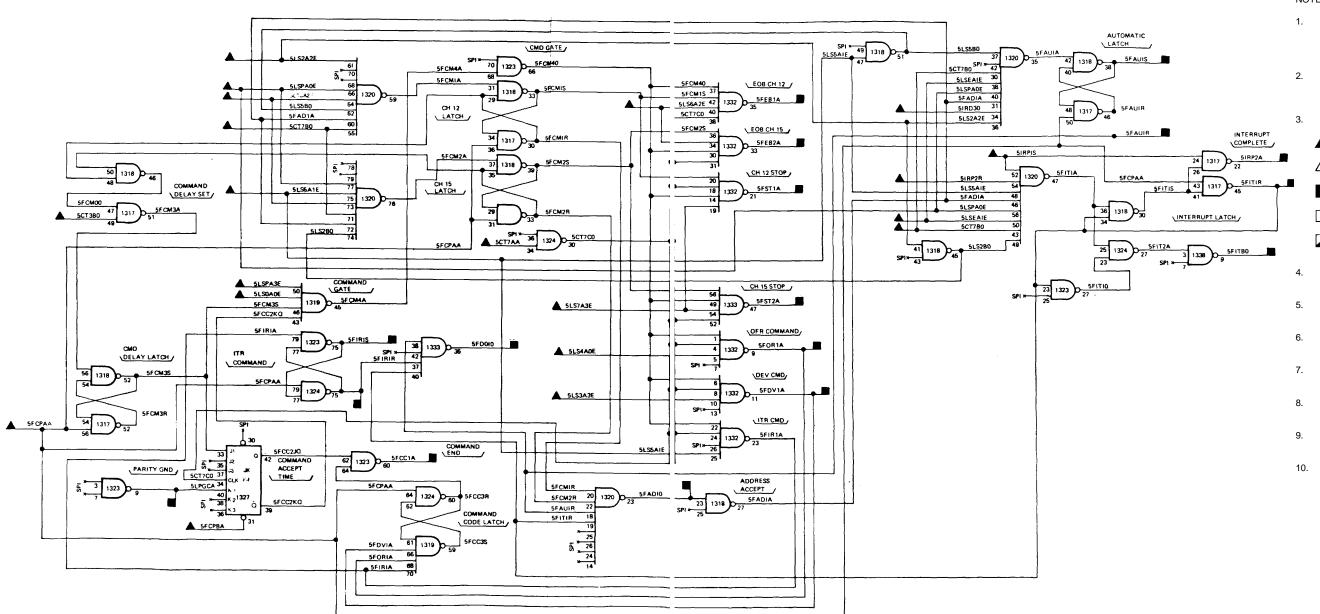
8VSV4OV 9CRFOA

DESTINATION

F0-SH

INP	UT	OUTP	υT		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT	10N	
3101112					
5 C T 3 B D	12800	5 F A D 10	12900		
5 C T 7 A A	12800	5 F A U 1 R	13200,	13700	
5 C * 7 B O	*2800	5 F A U 1 S	13000,	13200	
5 F [PAA	12900	5 F C C 1 A	12900		
5£CPBA	12900	5 F D V 1 A	12900		
5:R030	13200	5 F D O 1 O	12800,	12900,	13000
5IRP1S	13500	5 F E B 1 A	13102		
5IRF2R	13500	5FEB2A	13102		
5LSCA2E	12601	5FIR1R	12900		
5LSEA1E	12601	5FIR1S	12900,	13000,	13600
5LSPA0E	12601	5FITB0	13101,	13102	
5LSPA3E	12601	5FIT1R	12900,	13000	
5 L S O A O E	12601	5FST1A	13200,	13400	
5LS2A2E	12601	5FST2A	13400		
5LS3A3E	12601	5FOR1A	12900		
5LS4ADE	12601	51RP2A	13500		
5LS5A1E		5LPGCA		13102,	13200
5LS6A2E		-			
5LS7A3E					

TM 9-1430-655-20-3-5



Change 3 FO-127. IOB Function Commands Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

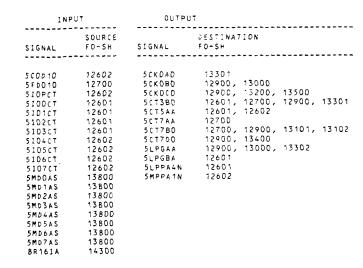
LOGIC DIAGRAM INDEX .

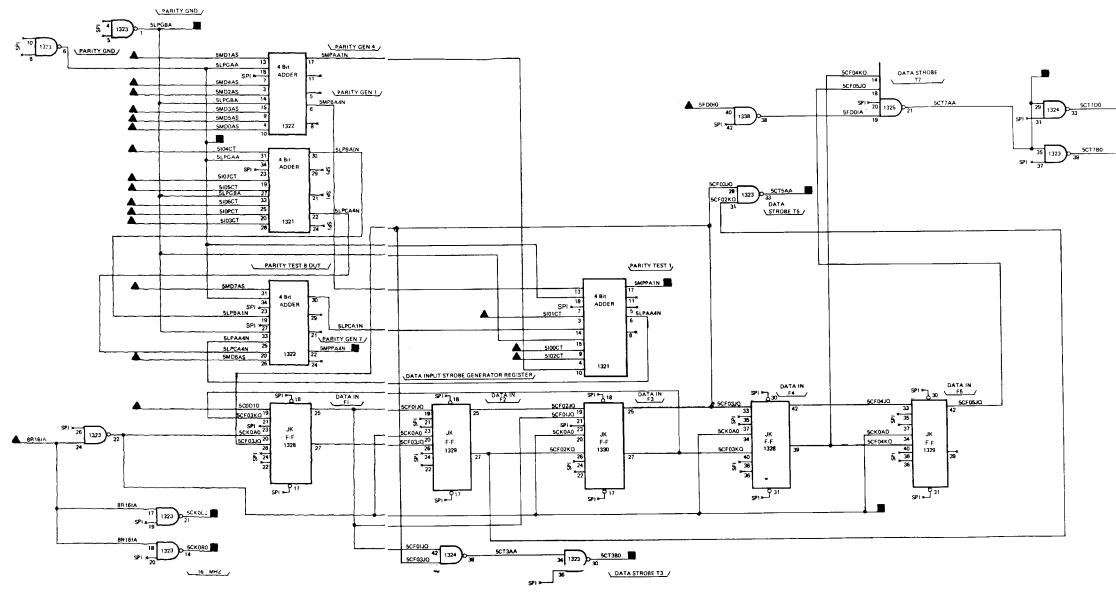
LISTING.

- INDICATES INPUT FROM ANOTHER FIGURE
- - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
 - _
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP

REFER TO TABLE 5-1 FOR CARD LOCATION IN

- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- . CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



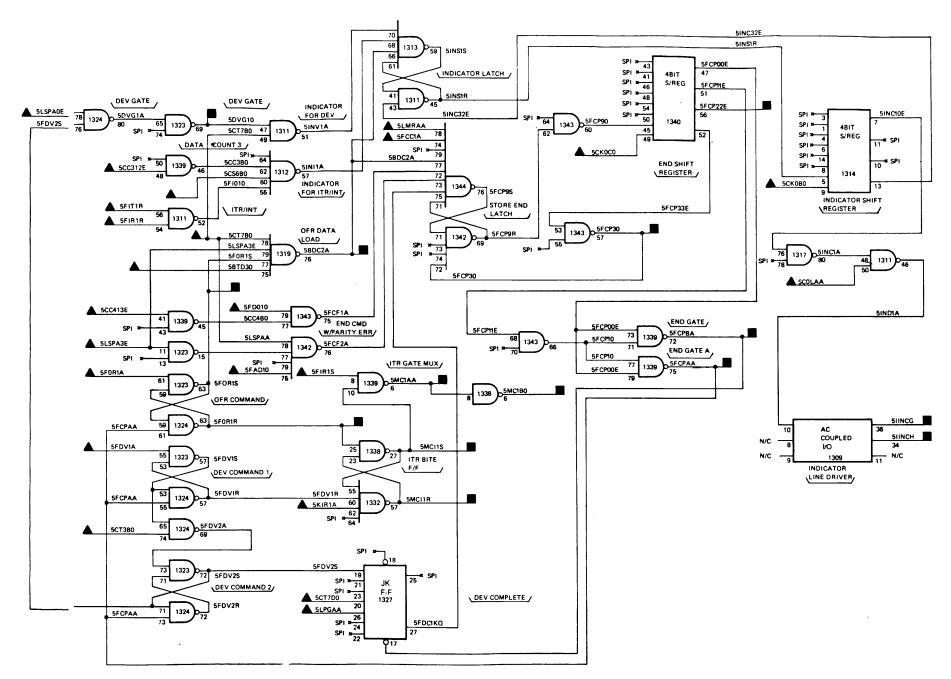


Change 3 FO-128. IOB Parity Generation Checker Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139 A1149 AND A1227

INP	TU	OUTPL	JT
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
SBTD 30 SCC312E SCC413E SCC40B0 SCK0C0 SCS6B0 SCT7B0 SCT7B0 SCT7D0 SCOLAA SCOLAA SCOLAA SFAD10 SFCC1A SFDV1A SFDV1A SFIR1R SFIR1R SFIR1R SFIR1R SKIR1A SKIR1A SLMRAA	13301 13000 12800 12800 12800 12800 12800 12800 12800 12800 12800 12700	5BDC2A 5DVG1O 5FCPBA 5FCP2E 5FCP3O 5FOR1R 5FOR1S 5IINCG 5IINCH 5MC11R 5MC11S 5MC1AA 5MC1BO	13301 13400 12700 12700 13000 13000 13301
5LPGAA 5LSPAOE 5LSPA3E	12800 12601 12601		



Change 3 FO-129. IOB Command Control Logic Diagram

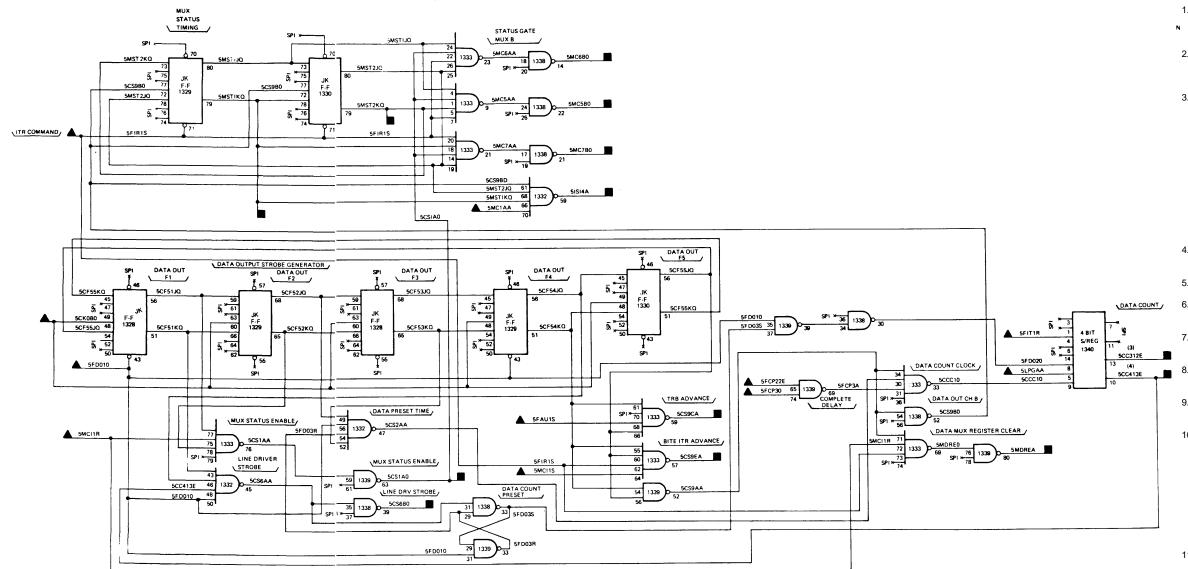
TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE

 - INDICATES OUTPUT TO ANOTHER FIGURE
- ☐ INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139 A1149 AND A1227

INATION
H
00
00
00
01, 12602, 12900
00, 26803, 28101
00, 26803, 28202
00, 13600
00, 13600, 13800
00
00, 13800
00
00
00



Change 3 FO-130. IOB Data Output Strobe Generator Logic Diagram

TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .

REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .

REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

AND CIRCUIT CARD PIN NUMBER

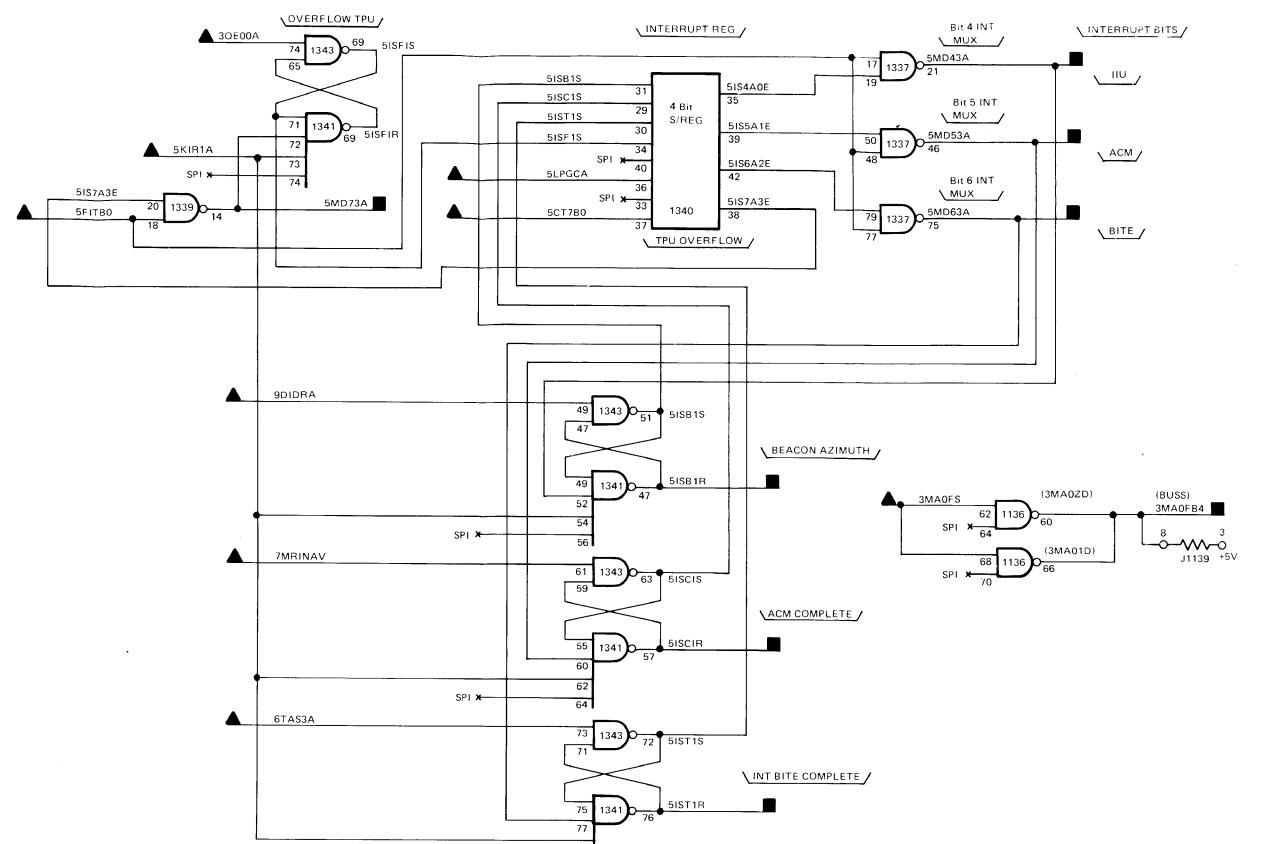
FROM CIRCUIT SYMBOL NOTE CARD LOCATION

B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139 A1149 AND A1227

INP	UT	OUTPL	Τ
SICNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
3MAOFS 3MAOFS 3MAOFS 3MAOFS 3QEOOA 3QEOOA 5CT7BO 5KIR1A 5LPG3A 6TAS3A 6TAS3A 7MRINAV 7MRINAV 9DIDRA	11900 26803 28102 07701 26803 28102 12800 12700 13402 12700 05200 26803 28202 02400 26803 28201 18600 26803	3 M A O F B 4 5 I S B 1 R 5 I S C 1 R 5 I S T 1 R 5 M D 4 3 A 5 M D 5 3 A 5 M D 7 3 A	26803 13500 13500 13500 13800 13800



SPI X-

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1, RIU BAY 1 CARD CAGE (1A1A1A4).
- 3. REFERENCES ARE AS FOLLOWS:
- ▲ INDICATES INPUT FROM ANOTHER FIGURE.
- △ INDICATES INPUT FROM THE SAME FIGURE.
- INDICATES OUTPUT TO ANOTHER FIGURE.
- INDICATES OUTPUT TO THE SAME FIGURE.
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE.
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAMS INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT-TO-UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - 8. REFER TO TABLE 5-39 FOR CARD PART NUMBER
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TM	9-1	430-	655	-20-	-3-5
---	----	-----	------	-----	------	------

	SKIR	59 61 7 63 51SN1JQ 68 68		
5ISD1S 5FEB3JQ 5FED1A SP1 ×	22 24 25 26	51SD2A SPI × 53 1339 57	SISI1S 5ISOA0E 21 5ISOA0E 21 5ISOA0E 21 5ISOA0E 27 5ISOA0E	3 1336 5MD03A 9 Bit 1 INT MUX / Bit 2 INT MUX / 5MD23A 66 Bit 3 INT MUX / 5MD33A 80
			5FEB2A 20 1343 14 5ISE2S 5KIR1A 18 19 20	5MD23A EOB 15 F/F 1343 21 5ISD1S 5KIR1A 38 5FED1A 42

INPUT

SIGNAL

5CT7B0

5FEB1A 5FEB2A

5FEB3JQ 5FED1A

5FITB0

518118

5KIR1A

5LPGCA 8ANPBA SOURCE

12800

12700

12700

13200

13400

12700

13500

13400

12700

17200

F O - S H

OUTPL

SIGNAL FO-SH

5 I S D 1 S

51SD2A

5ISE2R

5MD03A

5MD13A

5MD23A

5MD33A

5ISN1KQ

13200

13500 13500 13500

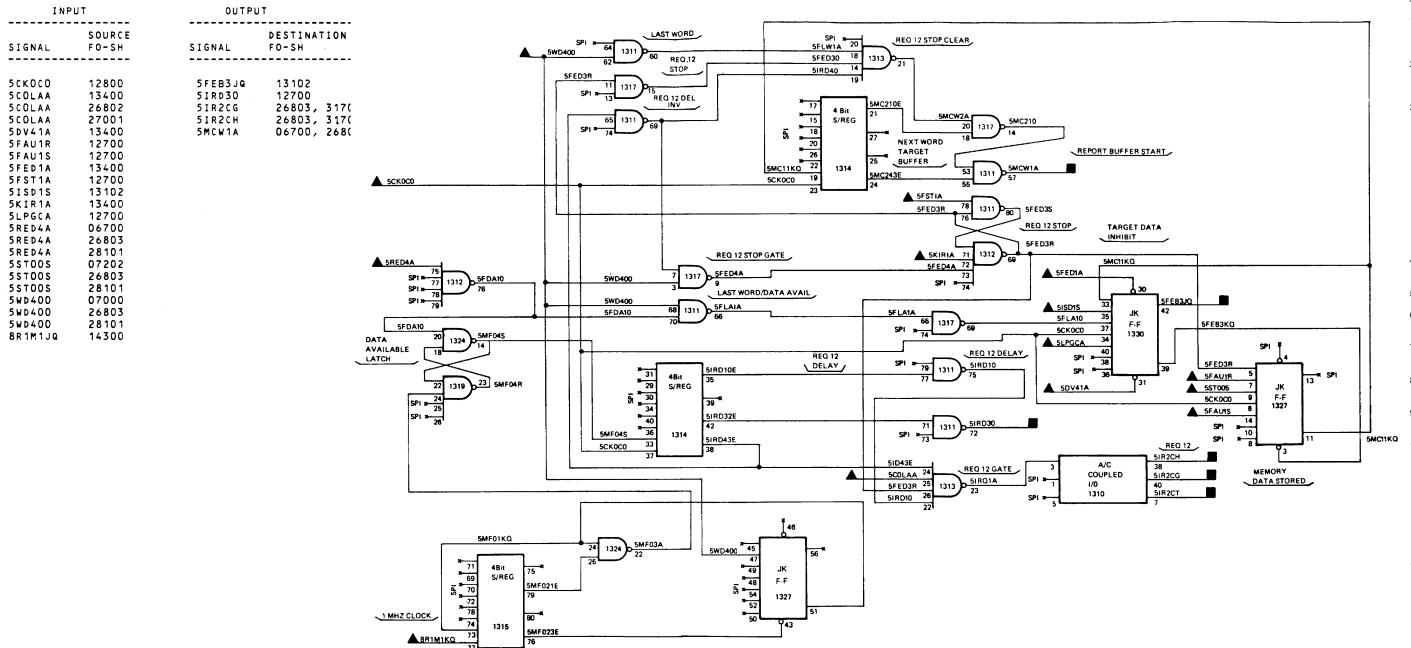
13800 13800

13800

DESTINATION

13500 13800

Change 3 FO-131. IOB Interrupt Register Logic Diagram (Sheet 2 of 2)



Change 3 FO-132. IOB I/O Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

 REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.

5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .

7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

 REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

 CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

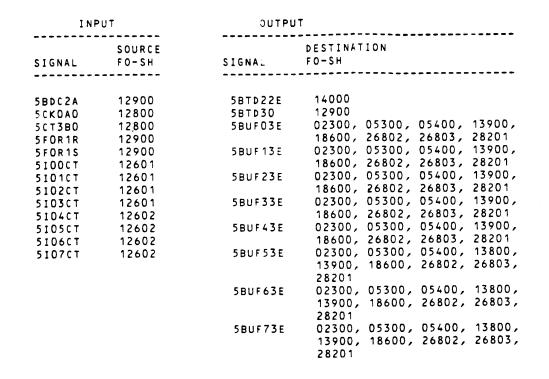
A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

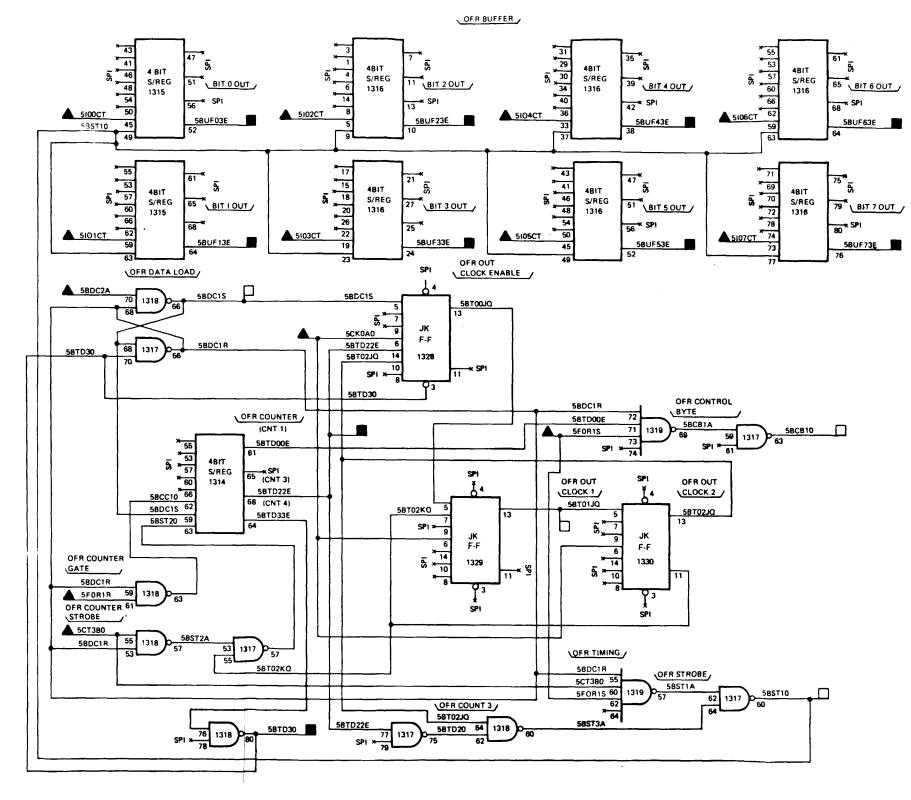
B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1149 AND A1227

MS200736A





Change 3 FO-133. IOB OFR Data Address and Clock Logic Diagram (Sheet 1 of 2)

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

 REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.

5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .

7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

 CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

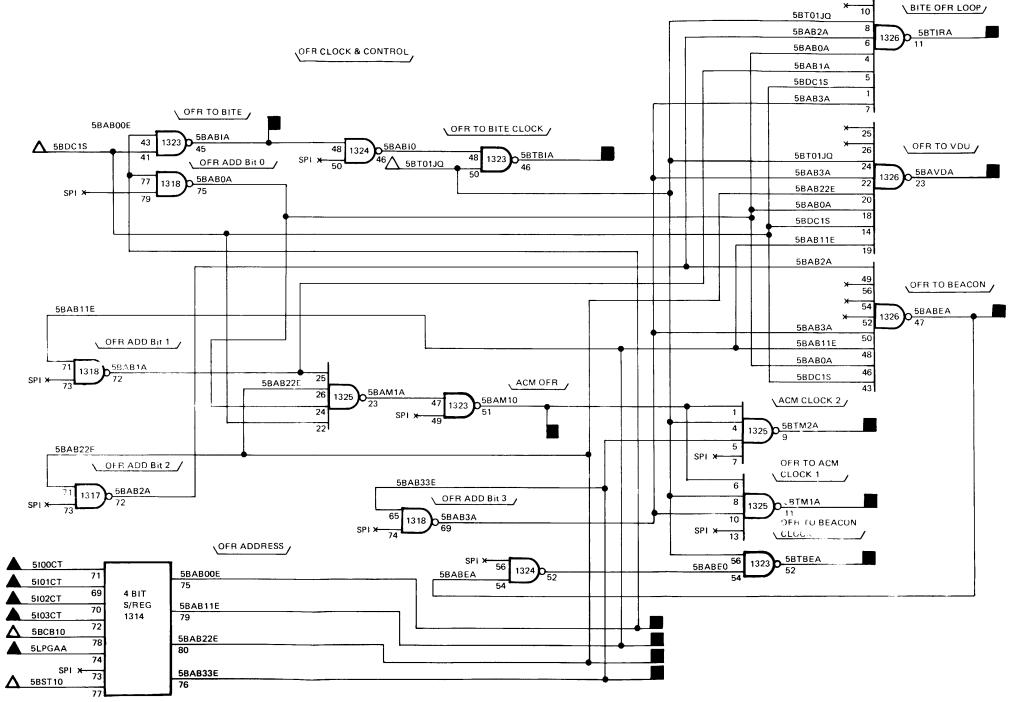
REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1149 AND A1227

MS 200737A

INPUT		OUTPUT				
SIGNAL	S O U R C E F O - S H	SIGNAL	DESTINA FO-SH	TION		
5100CT 5101CT 5102CT 5103CT 5LPGAA	12601 12601 12601	5BABEA 5BABIA 5BABOOE 5BAB11E 5BAB22E 5BAB33E	05200, 13600 13600 13600		26802,	26803
		5BAVDA 5BTBEA 5BTBIA 5BTIRA	18600, 05300, 05400, 01501,	26803 26803, 26803,	28202 28201 28201	26803,



NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

↑ INDICATES INPUT FROM THE SAME FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

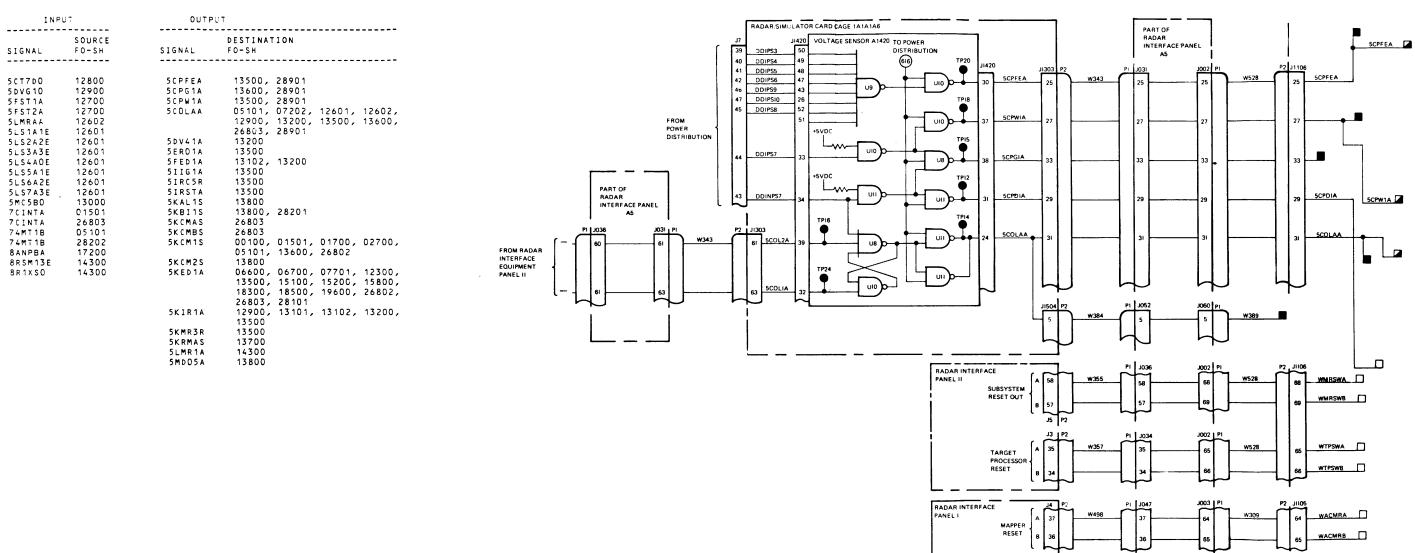
INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- S. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1149 AND A1227

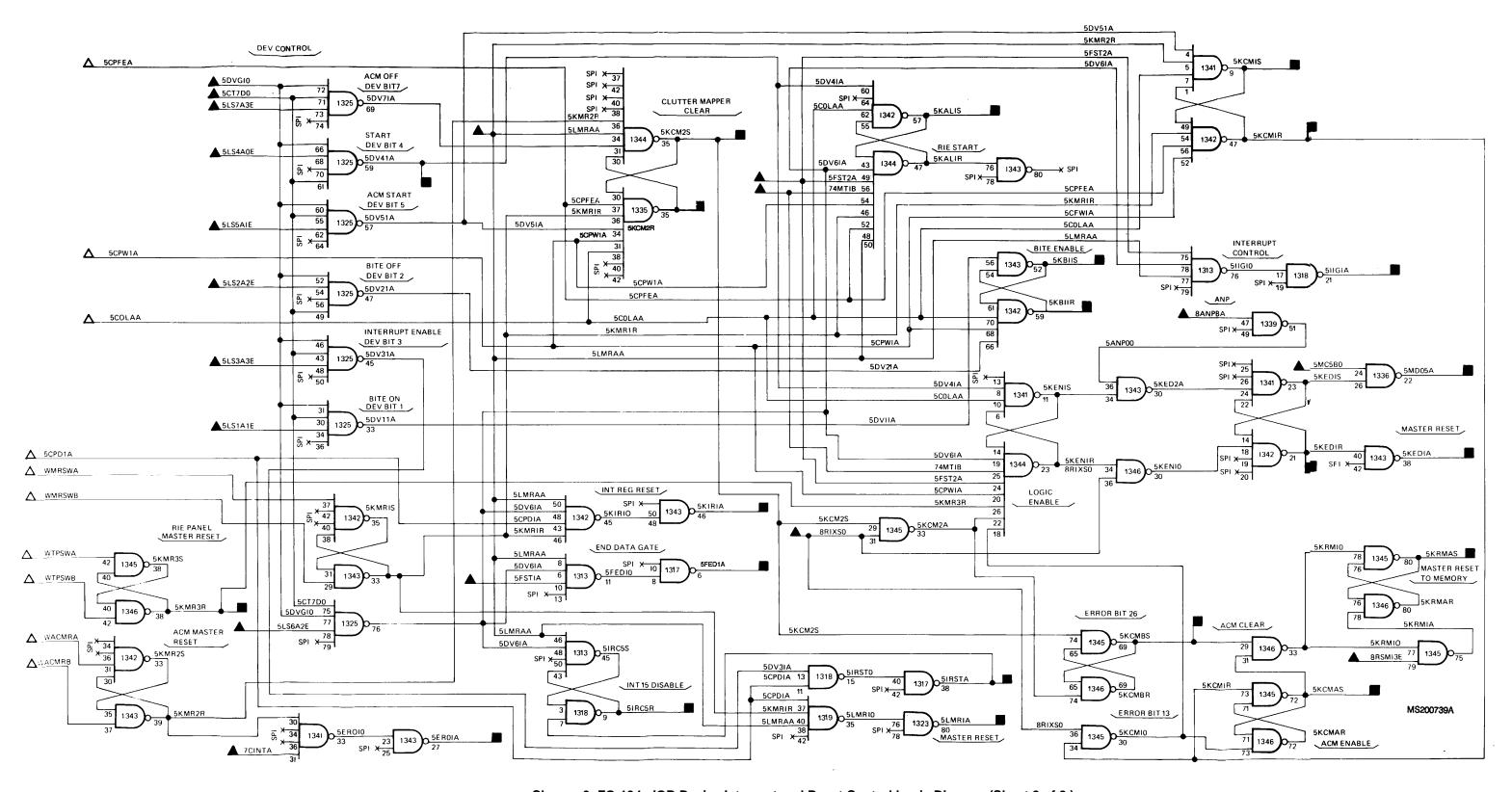
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Change 3 FO-133. IOB OFR Data Address and Clock Logic Diagram (Sheet 2 of 2)

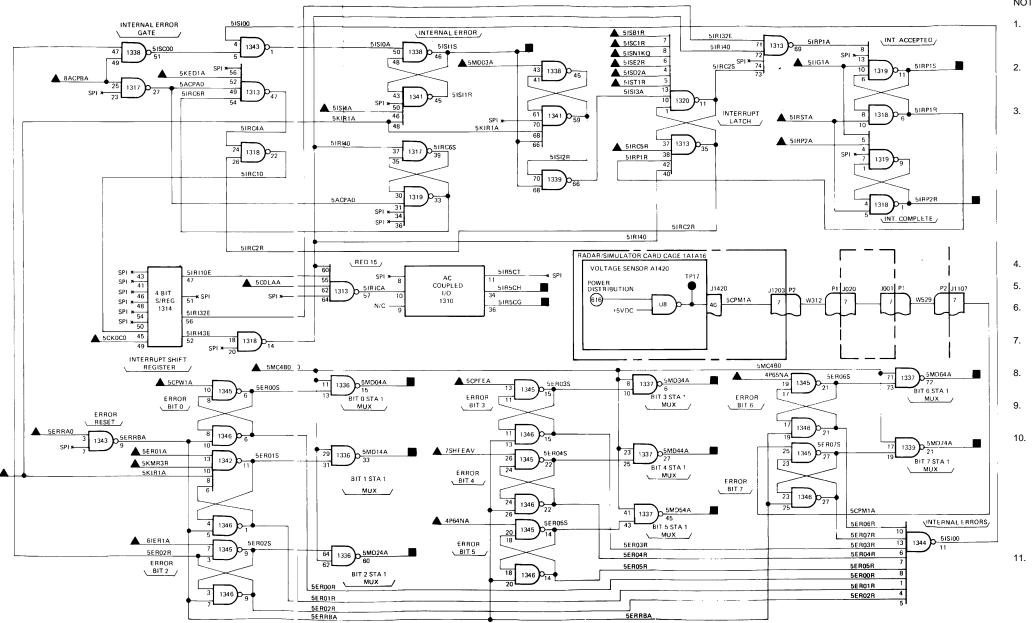


Change 3 FO-134. IOB Devise Interrupt and Reset Control Logic Diagram (Sheet 1 of 2)

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



Change 3 FO-134. IOB Devise Interrupt and Reset Control Logic Diagram (Sheet 2 of 2)



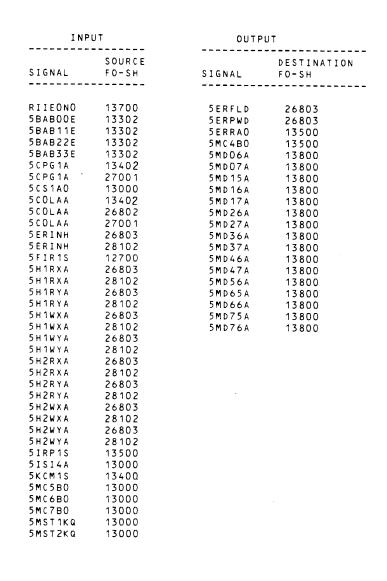
Change 2 FO-135. IOB Status 1 Error Register and Control Logic Diagram

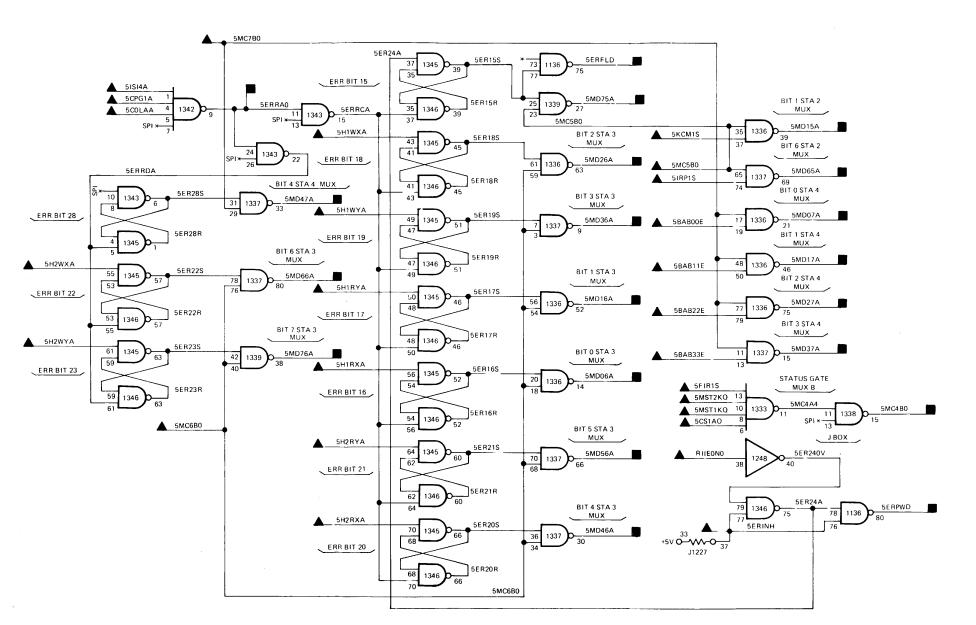
NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
 - ↑ INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
 - INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
 - REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE

- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227





Change 2 FO-136. IOB Status 2, 3 and 4 Error Register Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

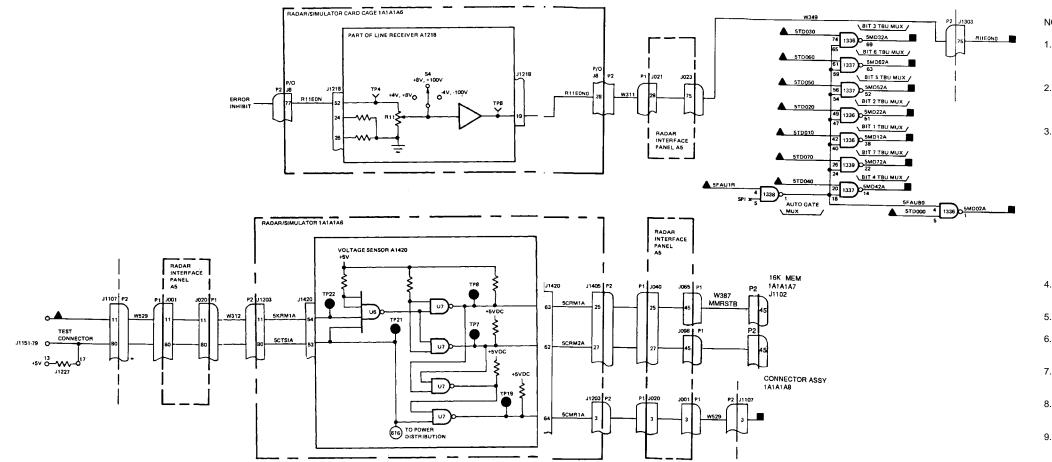
INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- . REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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INF	PUT	OUTP	TL		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	TION	
5FAU1R 5KRMAS 5TD000 5TD000 5TD020 5TD020 5TD020 5TD030 5TD030 5TD030 5TD040 5TD040 5TD040 5TD050 5TD050 5TD050 5TD050 5TD050 5TD060 5TD060 5TD060 5TD060 5TD070 5TD070	12700 13400 07400 26803 28101 07400 26803 28101 07400 26803 28101 07400 26803 28101 07400 26803 28101 07400 26803 28101	RIIEONO SCRMIA SCRMZA SMD02A SMD12A SMD2A SMD32A SMD42A SMD52A SMD52A SMD52A SMD72A	13600 13800 13800 13800 13800 13800 13800 13800 13800 13800 13800 29501 29501	28001,	28102



FO-137. IOB Automatic Gate Multiplexer Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

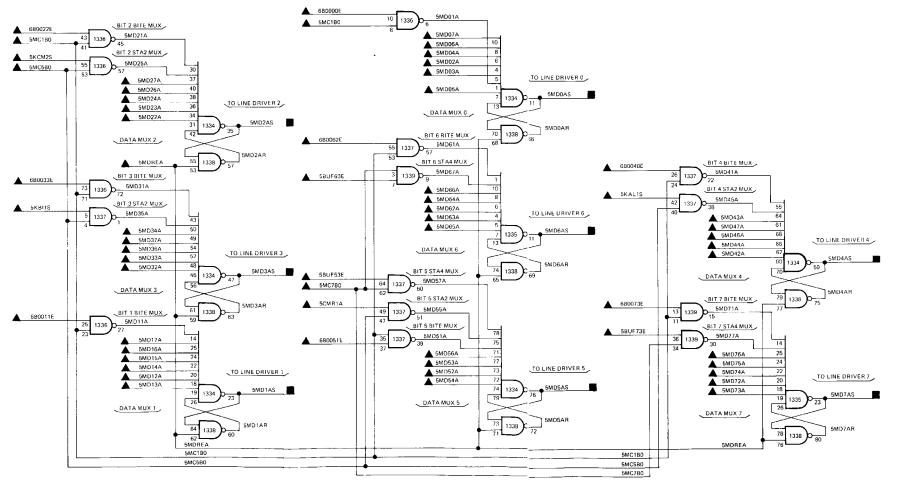
INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- . REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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INP		INP	JT	OUTP	UT
SIGNAL	SOURCE FO-SH	SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
55333EEE 55863331 A S S S S S S S S S S S S S S S S S S		5MD 5 3 A SMD 5 6 A SMD 5 6 A SMD 5 6 A SMD 6 2 A SMD 6 2 A SMD 6 3 A SMD 6 3 A SMD 6 3 A SMD 6 3 A SMD 7 5 A SMD 7	13101 13500 13600 13700 13101 13500 13600 13700 13500 13500 13500 13600 13600 26803 28101 26803 28202 05400 26803 28202 05400 26803 28202 05400 26803 28202 05400 26803 28202 05400 26803 28202 05400 26803 28202 05400 26803 28202	SMDDAS SMDTAS SMDTAS SMDTAS SMDTAS SMDTAS	12601, 12800 12601, 12800 12601, 12800 12601, 12800 12602, 12800 12602, 12800 12602, 12800



FO-138 IOB Input/Output Data Multiplexer Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

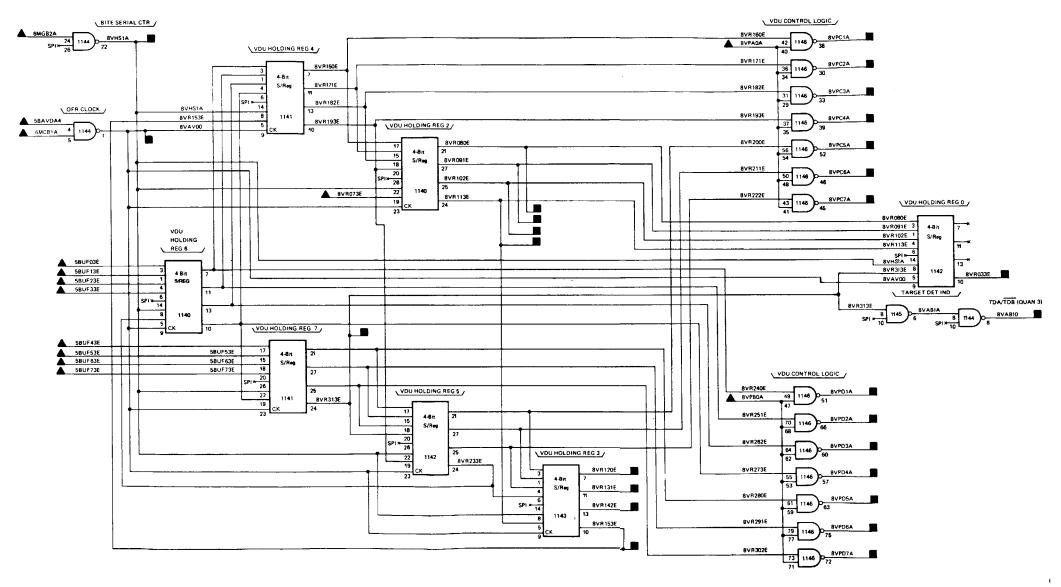
☐ INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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INP	U T.	0 U T P U	T
CICNAL	SOURCE	SIGNAL	DESTINATION FO-SH
310445			
5BAVDA		8V4B10	15300
58UF03E		8 V A V O O 8 V H S 1 A	14000
5 B U F O 3 E		8 V P C 1 A	14100
	28201	8VPC2A	14 100
58UF 13E		8 V P 🖰 3 A	14100
58UF13E		8VPC4A	14100
5 B U F 13 E	13301	8VPC5A	14100
		8VP06A	14100
5 B U F 2 3 E 5 B U F 2 3 E	28201	8 V P C 7 A	14100
58UF Z 3 E	17701	8VPD1A	14100
5BUF33E	26803	8VPD2A	14100
58UF33E 58UF33E	20201	8VPD3A	14100
50015/35	13301	8VPD4A	14100
58UF 43E 58UF 43E 58UF 43E 58UF 53E 58UF 53E 58UF 53E 58UF 63E 58UF 63E	26803	8VPD5A	
5811F43E	28201	8VPD6A	
58UF53E	13301	8VPD7A	14100
58UF53F	26803	8VR033E	14000
5 B U F 5 3 F	28201	8 V R O 8 O E	14000
5BUF63E	13301	8 V R O 9 1 E	
5BUF63E	26803	8VR102E	
5BUF63E	28201	8VR113E	
5BUF73E		8 V R 1 2 O E	
	26803	8 V R 13 1 E	
	28201	8 V R 1 4 2 E	
	05600	8 V R 1 5 3 E	
	27201	8 V R 3 1 3 E	16500
6MGB2A	05600		
8VPA0A	14100		
BVPBOA			
8 V R O 7 3 E	14000		



Change 3 FO-139. VDU Holding Registers Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

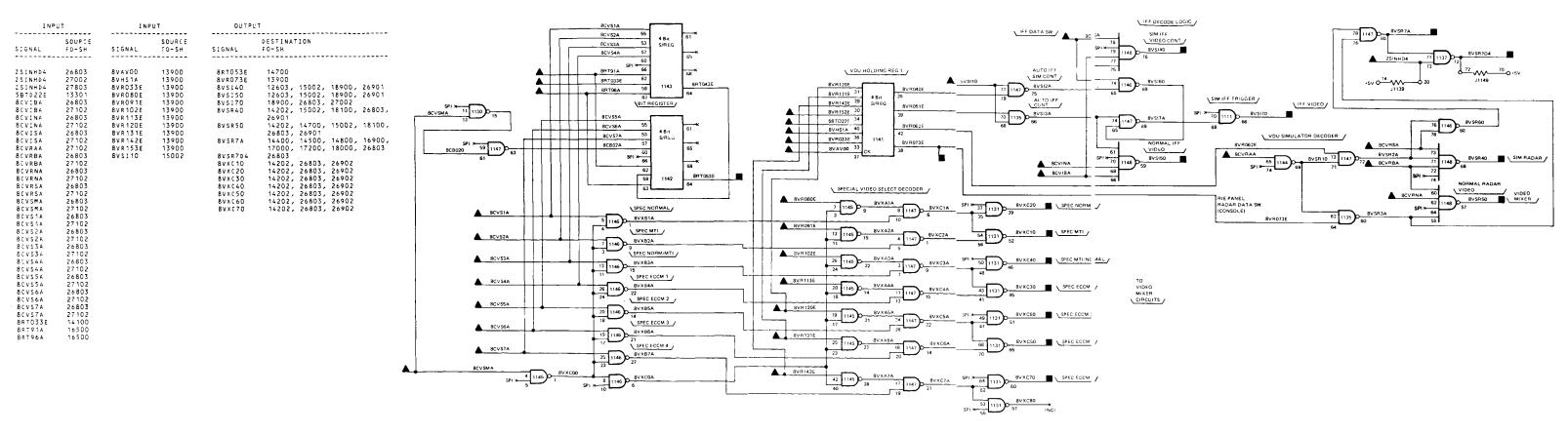
INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 0. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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Change 3 FO-140. VDU Special Video Select and IFF Decode Logic Diagram

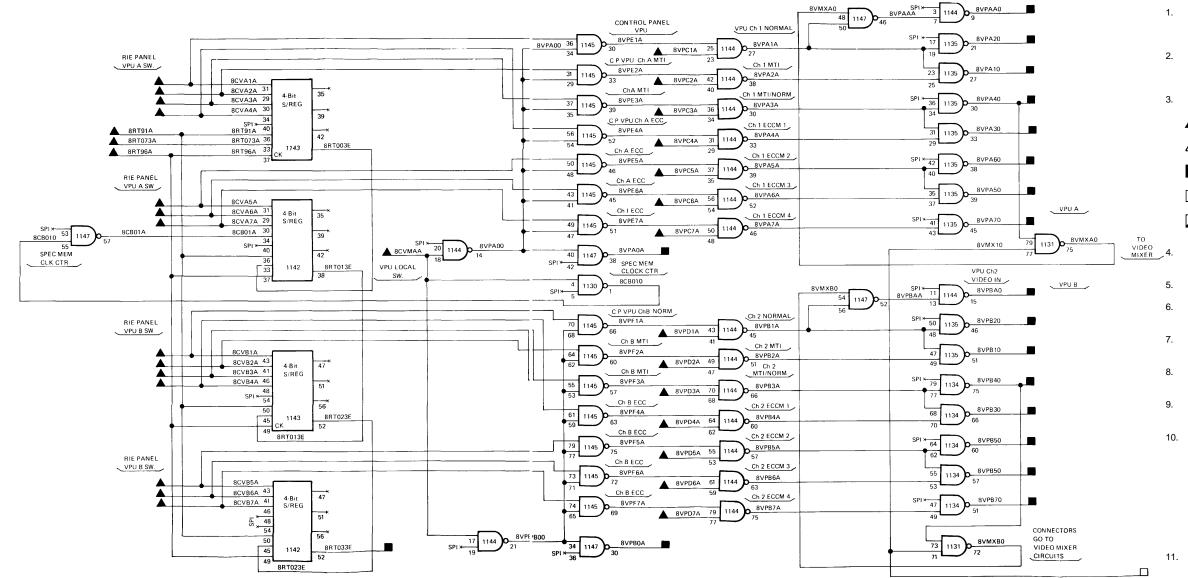
NOTES: UNLESS OTHERWISE SPECIFIED

- №1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
 - ↑ INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- . REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - AND CIRCUIT CARD PIN NUMBER

FROM CIRCUIT SYMBOL NOTE CARD LOCATION

- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 1. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INP	JT	INF	PUT	0UTP	UT		
SIGNAL	SOURCE FO-SH	SIGNAL	S O U R C E F O – S H	SIGNAL	DESTINAT FO-SH		
8CMTIS 8CMTIS 8CVA1A 8CVA1A	26803 27001 26803 27101	8 V P D 2 A 8 V P D 3 A 8 V P D 4 A 8 V P D 5 A	13900 13900 13900 13900	8 R T O 3 3 E 8 V M N S A 8 V M N S O 8 V P A A O	14202,	26803, 26803,	
8 C V A 2 A 8 C V A 2 A 8 C V A 3 A 8 C V A 3 A 8 C V A 4 A	26803 27101 26803 27101 26803	8 V P D 6 A 8 V P D 7 A	13900 13900	8 V P A O A 8 V P A 1 O 8 V P A 2 O 8 V P A 3 O 8 V P A 4 O	13900 14202, 14202, 14202,	26803, 26803, 26803, 26803,	26901 26901
8 C V A 4 A 8 C V A 5 A 8 C V A 5 A 8 C V A 6 A 8 C V A 6 A	27101 26803 27101 26803 27101			8 V P A 5 O 8 V P A 6 O 8 V P A 7 O 8 V P B A O 8 V P B O A	14202, 14202, 15300 13900	26803, 26803, 26803,	26902 26902
8 C V A 7 A 8 C V A 7 A 8 C V B 1 A 8 C V B 1 A 8 C V B 2 A	26803 27101 26803 27101 26803			8 V P B 1 0 8 V P B 2 0 8 V P B 3 0 8 V P B 4 0 8 V P B 5 0	14202, 14202, 14202, 14202,	26803, 26803, 26803, 26803,	26902 26902 26902 26902
8 C V B 2 A 8 C V B 3 A 8 C V B 3 A 8 C V B 4 A 8 C V B 4 A	27101 26803 27101 26803 27101			8VPB60 8VPB70		26803, 26803,	
8 C V B 5 A 8 C V B 5 A 8 C V B 6 A 8 C V B 6 A 8 C V B 7 A	26803 27101 26803 27102 26803						
8 C V B 7 A 8 C V M A A 8 C V M A A 8 R T O 7 3 E 8 R T 9 1 A	27102 26803 27102 14700 16500						
8 R T 9 6 A 8 V M T N A 8 V M T N A 8 V M T N A 8 V P C 1 A	16500 18900 26803 27002 13900						
8 V P C 2 A 8 V P C 3 A 8 V P C 4 A 8 V P C 5 A 8 V P C 6 A	13900 13900 13900 13900 13900						
8VPC7A 8VPD1A	13900 13900						



FO-141. VDU Video Selection and Decoding Logic Diagram (Sheet 1 of 2)

NOTES: UNLESS OTHERWISE SPECIFIED

VPU Ch 1 VIDEO IN

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

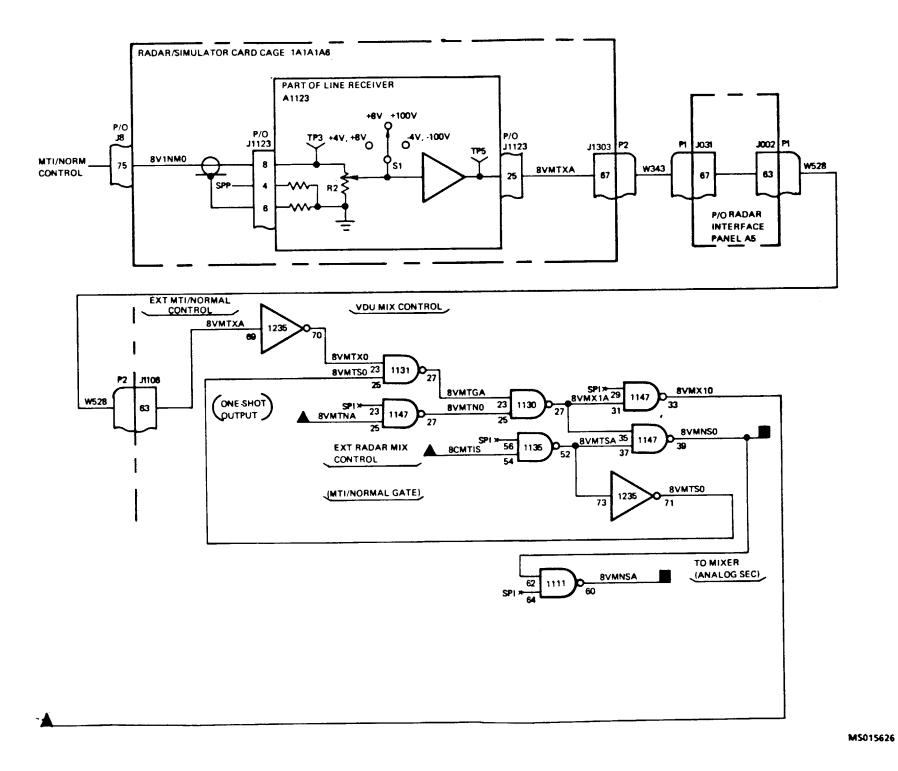
INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC

REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

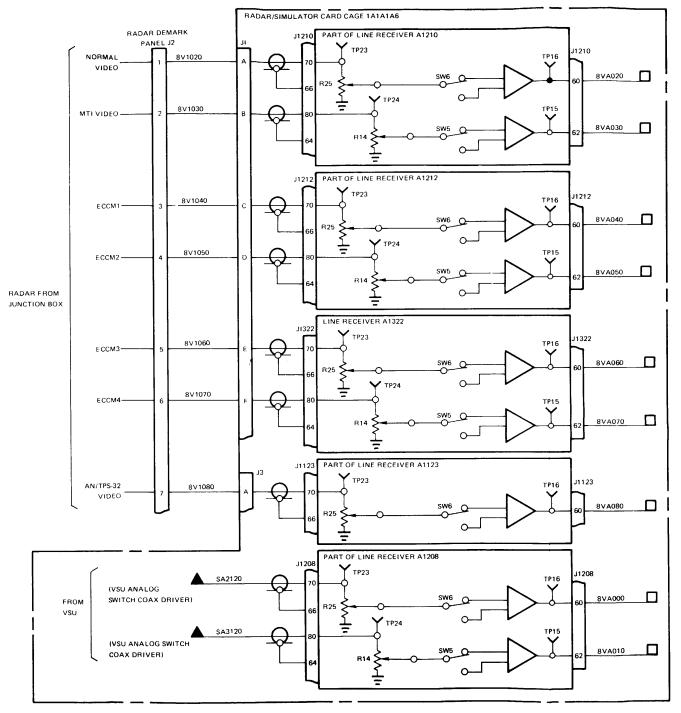
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- . REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
 - SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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FO-141. VDU Video Selection and Decoding Logic Diagram (Sheet 2 of 2)

INPUT						
SIGNAL	S O U R C					
SA2120	22803					
SA3120	22804					

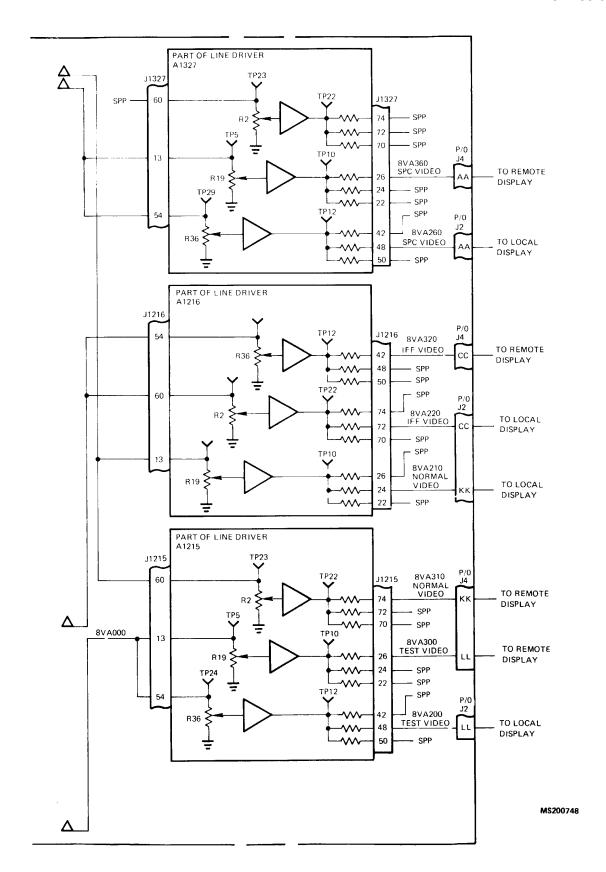


FO-142. VDU Video Mixers Logic Diagram (Sheet 1 of 3)

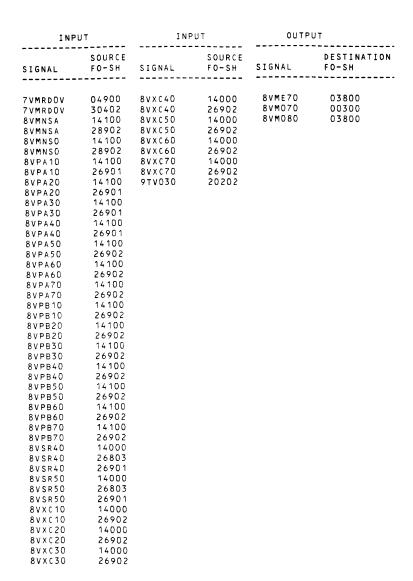
NOTES: UNLESS OTHERWISE SPECIFIED

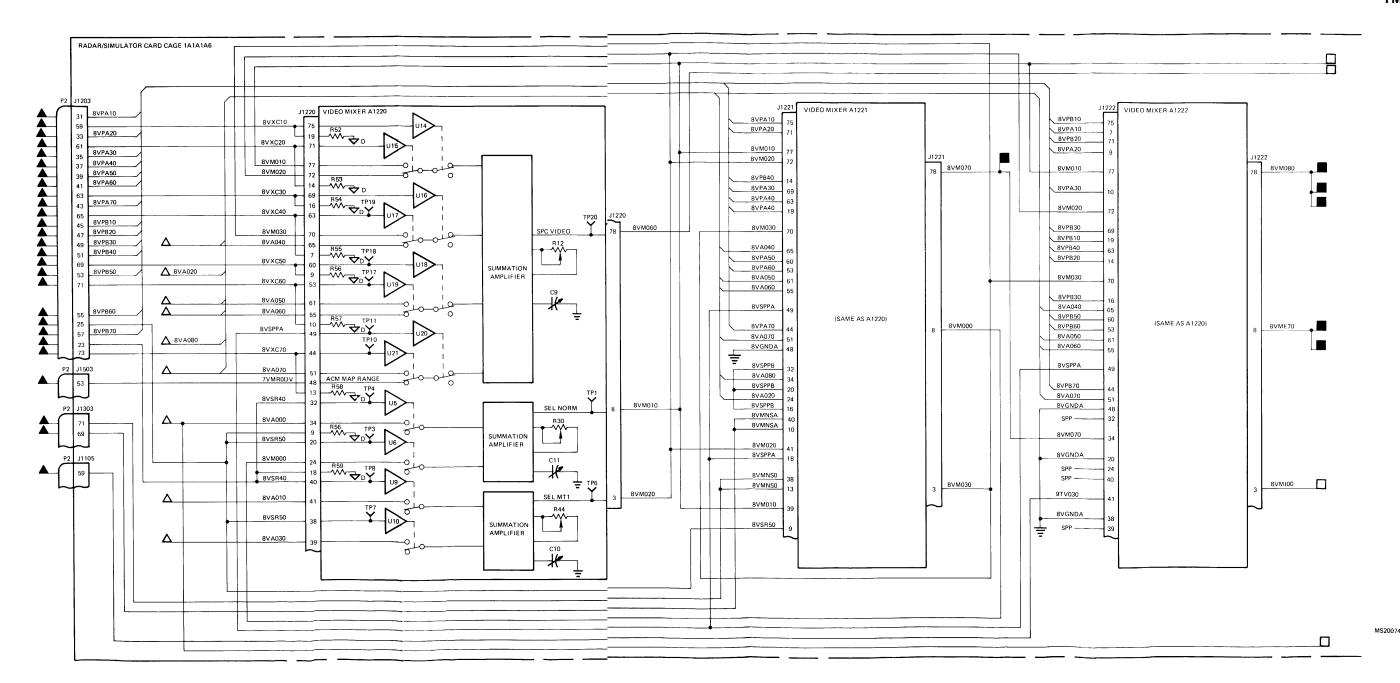
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- . ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6.)
- 3. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING:
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 5. REFER TO RIE POWER DISTRIBUTION
 DIAGRAMS FOR DC POWER AND GROUND
 CIRCUITS

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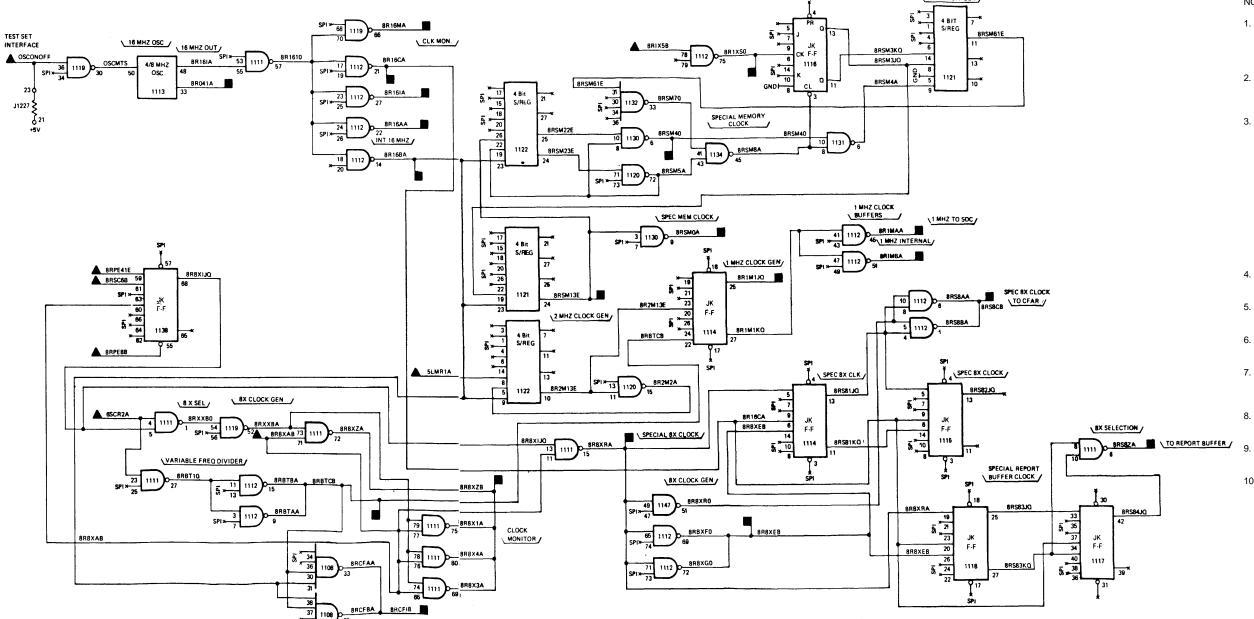
FO-142. VDU Video Mixers Logic Diagram (Sheet 3 of 3)



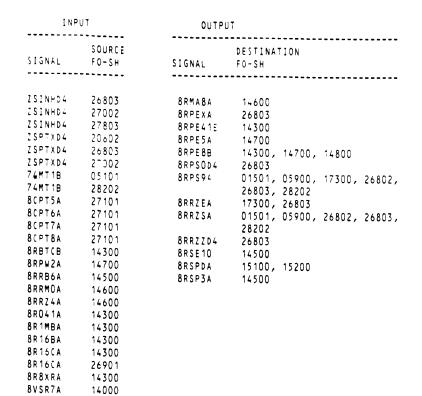


FO-142. VDU Video Mixers Logic diagram (Sheet 2 of 3)

INPUT		OUTPUT				
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT: FO-SH	ION		
5LMR1A 6SRC2A 6SRC2A 8RPE41E 8RPE8B 8RSC6B 8R1XSB 8R1XSB 8R1XSB 8R1XSB 8R1XSB	13400 05900 27201 14400 14400 14900 00300 14900 26802 26803 27501 14900	8RBTCB 8RBT10 8RCF1B 8RSM0A 8RSM13E 8RSM40 8RS8CB 8RS8ZA 8RO41A 8R1MAA 8R1MBA	15001 26803 06001, 13400 14600, 26803 14400, 13200, 13400, 05200, 14400, 12800, 26803 14900, 14400, 00100, 06600,	26803, 26803, 14500, 26803, 15001 14500, 14500, 14500, 15001 00703, 06700, 15002,	27502 28203 15001 14600 27201 14700 15002,	02500, 07900,

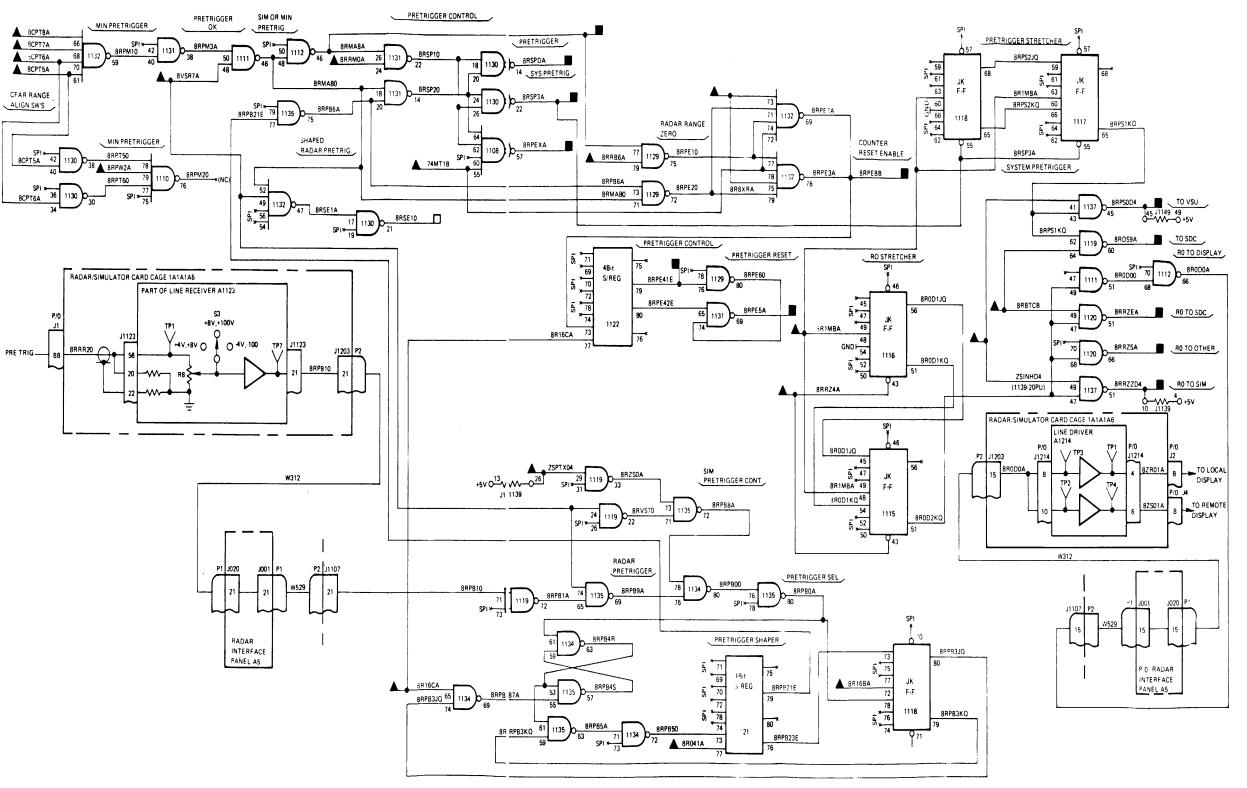


- I. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
- INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- ☐ INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
 - CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



8VSR7A

26803



Change 3 FO-144. RSU Pretrigger/Range Zero Stretcher Logic Diagram

INDICATES INPUT FROM ANOTHER FIGURE

CONTAINED IN EQUIPMENT RACK 1.

RIU BAY 1 CARD CAGE (1A1A1A4.)

REFERENCES ARE AS FOLLOWS:

PARTIAL REFERENCE DESIGNATIONS ARE

SHOWN: FOR COMPLETE DESIGNATIONS. PREFIX

WITH APPLICABLE UNIT NUMBER AND ASSEMBLY

ALL CIRCUITS SHOWN ON THIS FIGURE ARE

NOTES: UNLESS OTHERWISE SPECIFIED

DESIGNATION.

INDICATES INPUT FROM THE SAME FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .

REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP

REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.

REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

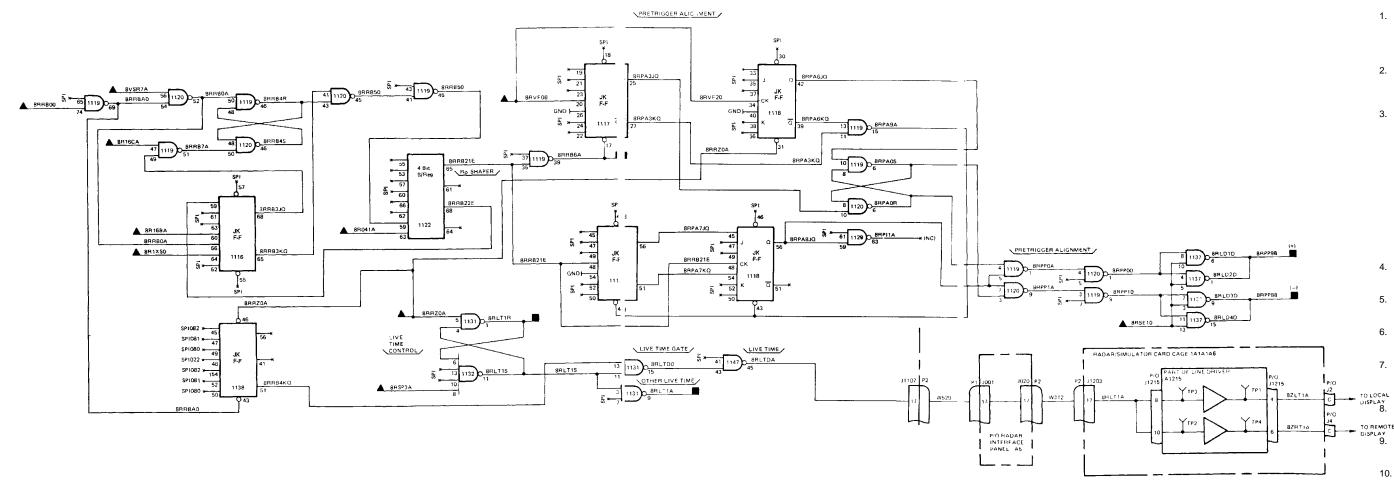
FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

REFER TO TABLE 5-39 FOR CARD PART

REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE

SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

MS200750B



OUTPUT

8RLTIA

8RLT1R 8RPP8B

8RPP9B

DESTINATION

14600, 26803

26803, 30102

00100, 08502, 12200, 12400,

INPUT

SIGNAL

8RRB00

8RRB00

8RRZOA 8RSE10 8RSP3A 8RVFOB

8R041A 8R1XS0 8R16BA

8R16CA

8R16CA

8VSR7A

8VSR7A

SOURCE

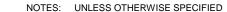
F0-SH

26803

Change 3 FO-145. RSU Pretrigger Alignment Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: UNLESS OTHERWISE SPECIFIED DESIGNATIONS, PREFIX WITH REPERING ABICATURE FANUMBER AND ASSEMBLE FOR COMPLETE OF STORATIONS.

 ASSEMBLE FOR SHOWLE FOR STORATIONS. ASSEMBLY DESIGNATION.
- ALL ÇIRÇULTŞU ŞHAQWAN ON FITHISAHEIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY'I CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS: REFERENCES AREMAS FROM LIGHT WAS: FIGURE.
- INDICATES INPUT FROM THE SAME FIGURE.
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES THE SAME FIGURE ■ INDICATES OUTPUT TO THE SAME AND
- INDICATES EDUTPOT TO ANOTHER FIGURE 4. REFER TO TABLE 5-1 FOR CARD LOCATION
- A. REFER TO TABLE S.1 FOR CARD LOCATION
 IN LOGIC DIAGRAMS INDEX.
 INDICATES OUTPUT TO THE SAME FIGURE
 B. REFER TO TABLE S.2 FOR KEY S. GNAL
 LOOK UP LISTING.
 INDICATES OUTPUT TO THE SAME AND
 AND PROFESHIEF TO CABLING DIAGRAM SECTION XIV.
 AND PROFESHIEF TO LABLING DIAGRAM SECTION XIV.
- REFER TO RIE POWER DISTRIBUTION
 REFER TO RIE POWER DISTRIBUTION
 REFER TO RIE POWER DISTRIBUTION
- LOGIC DIAGRAM INDEX . B. REFER TO SECTION II FOR CIRCUIT CARD
- REFER TO TABLE SET OF REY SIGNAL LOOK UP LISTING. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
 - REFER TO GARMING RIGIAGRAM SECTION XII FOR UNIT TO UNITERSITY NEEL CAMBLING.
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION
 REFER TOOD CIRCUIT CARD TO WARE DISTRIBUTION DIAGRAMS REFORD TOOK 5-BOOM EARD PAND UMBROUND CIRCUITS REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- REFER, TO SECTION SILF FOR GIRGUIT GARD CHIP FUNCTION DE SIGNATION OF AND A1227
- CIRCUIT SYMBOLS INCLUDE CARD MESICATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- REFER TO TABLE 5-39 FOR CARD PART
- REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND



- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- . ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- B. REFERENCES ARE AS FOLLOWS:
- INDICATES INPUT FROM ANOTHER FIGURE
- △ INDICATES INPUT FROM THE SAME FIGUR
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AN ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
 REFER TO TABLE 5-2 FOR KEY SIGNAL
- LOOK UP LISTING.

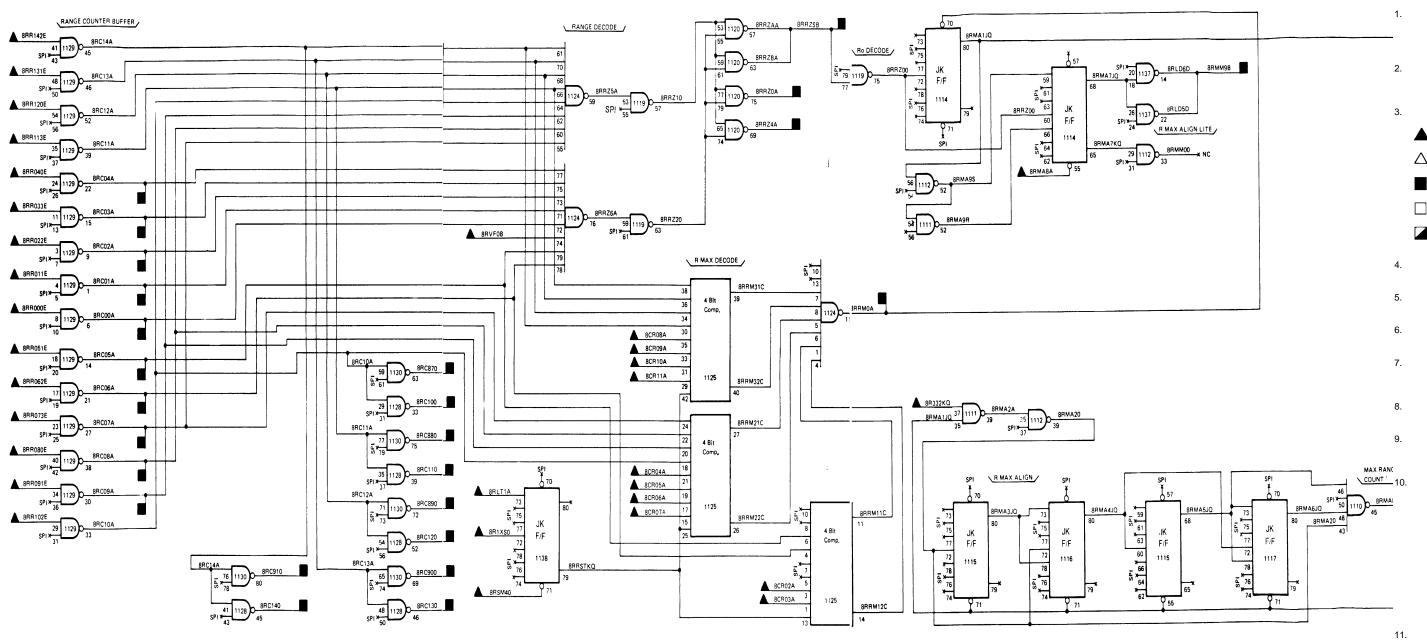
 6. REFER TO CABLING DIAGRAM SECTION XII
- FOR UNIT TO UNIT SIGNAL CABLING .

 REFER TO RIE POWER DISTRIBUTION
- DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



INPUT

SIGNAL

8CRO2A

8CR03A

8CRO4A

8CR05A

8CR06A

8CR07A

8CRO8A

8CRO9A

8CR10A

8CR11A

8RLTIA

8RLTIA

8RMA8A

8RR000E

8RR022E

8RRO33E

8RR040F

8RR051F

8RR062E

8RR073E

8RR080E

8RR091E

8RR102E

8RR113E

8RR120E

8RR142E

8 R S M 4 O 8 R V F O B

8R1XS0

8R332KQ

8RR011E

SOURCE

F 0 - S H

27101

14500

26802

26901

14400

14800

14800

14800

14800

14800

14800

14800

14800

14800

14800

14800

14800 14800

14800

14300

14300

15001

08501, 18401, 26803, 27501

08501, 18401, 26803, 27501

08501, 18401, 26803, 27501

08501, 18401, 26803, 27501

07600, 07701, 07800, 12200,

18700, 26802, 26803, 27502

14500, 15001, 15100, 15200,

02500, 26803, 27202

02500, 26803, 27202

02500, 26803, 27202

02500, 26803, 27202

02500, 26803, 27202

15600, 15800, 15900

26803, 30101

14400

07600, 08501, 18401, 26802,

DESTINATION

F0-SH

14900

14900 14900

14900

14900

14900

14900

14900

14900

26803, 27501

SIGNAL

8RCOOA

8RC01A

8RC02A

8RCO3A

8RC04A

8RC05A

8RCO6A

8RCO7A

8RCO8A

8RCO9A

8RC100

8RC120

8RC130

8RC140

8RC870

8RC880

8RC890

8RC900

8RC910

8RMM9B

8RRMOA

8RRZSB

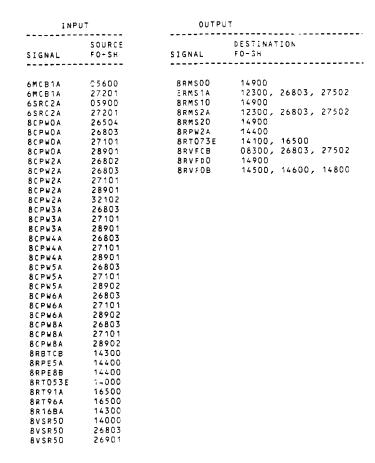
8RRZOA

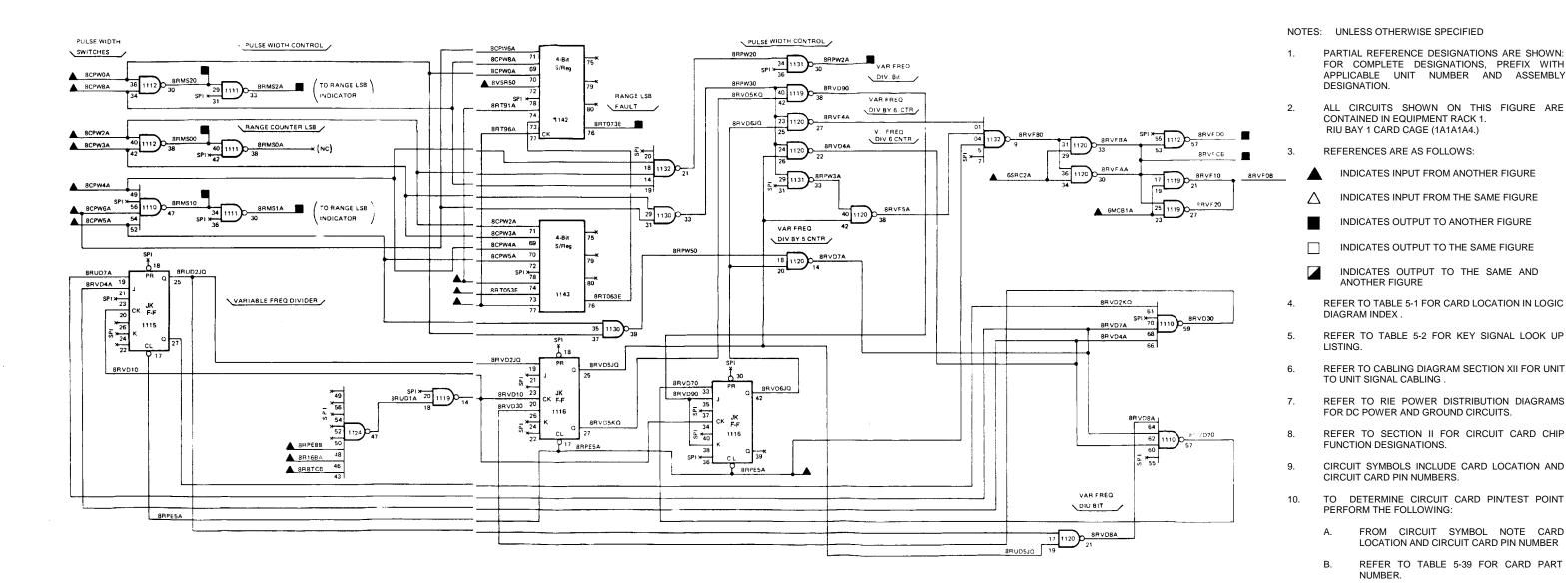
8RRZ4A

FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER REFER TO TABLE 5-39 FOR CARD PART

REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

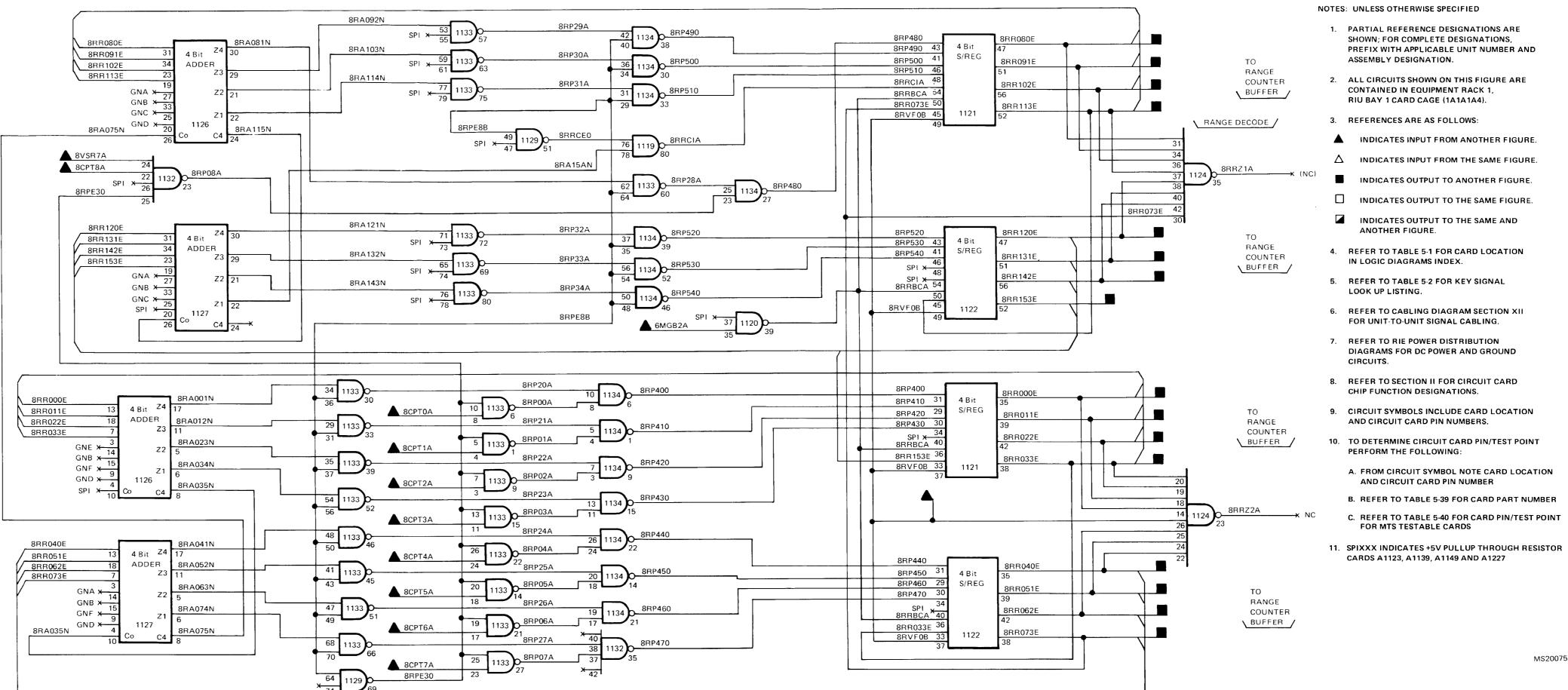
NUMBER.





Change 3 FO-147. RSU Variable Frequency Divider Logic Diagram

SIGNAL FO-SH SIGNAL F	ESTINATION O-SH
6MGB2A 05600 8RR000E	
8CPT2A 27101 8RR033E 8CPT3A 27101 8RR040E 8CPT4A 27101 8RR051E	14600 14600 14600 14600 14600 14600 14600 14600 14600 14600 14600 14600 14600



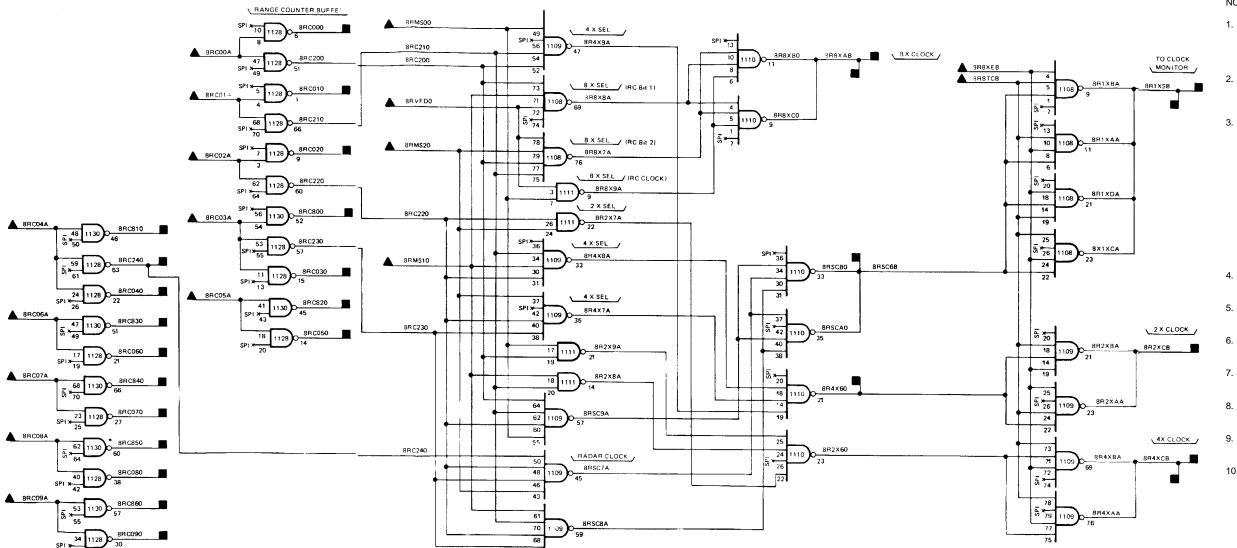
- PREFIX WITH APPLICABLE UNIT NUMBER AND

- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT

MS200754

FO-148. RSU Range Counter Logic Diagram

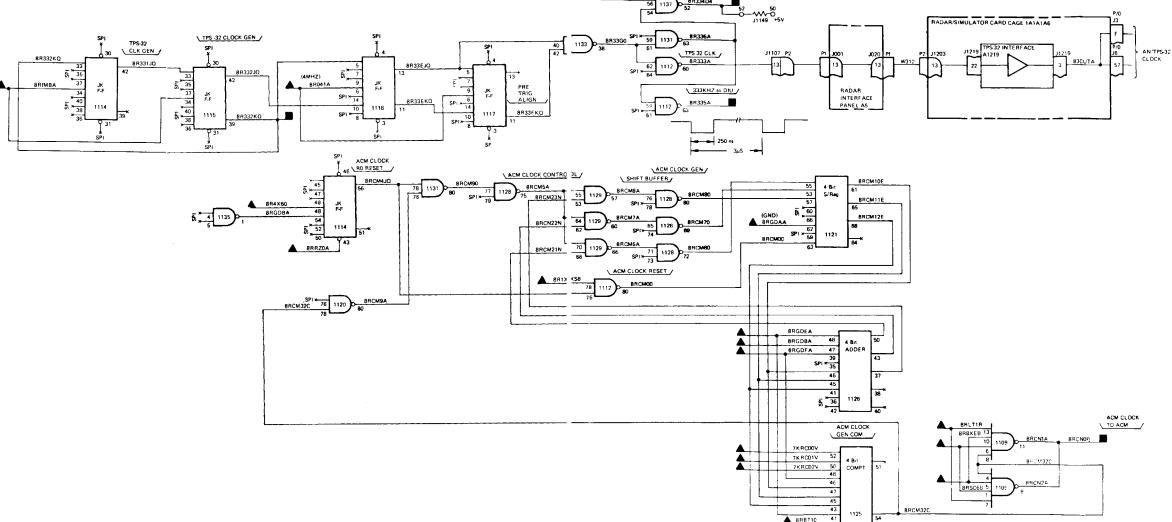
INPUT		OUTP: T					_
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	TON			
			20504	42400	2.000	24007	
BRBTCB BRCOOA	14300 14600	8 R C O O O	27501	12100,	26802,	26803,	
BRC01A	14600	8RC010		12100,	26802,	26803,	
BRCOZA	14600	8 R C O 2 O	27501 08501,	12100,	18300,	24802	
3 R C O 3 A 3 R C O 4 A	14600 14600	6 K C U Z U	26803,		10300,	20002,	
BR C O S A	14600	8 R C O 3 O		12100,	18402,	26802,	
BRCO6A BRCO7A	14600 14600	8RC040	26803, 08501,	27501 12100 -	18402,	26802.	
BRCO8A	14600		26803,	27501	-	•	
BRCO9A Brmsoo	14600 14700	8RC050	08501, 26803,	12100,	18401,	26802,	
3 R M S 1 O	14700	8RC060	08501,	12100,	18401,	26802,	
BRMS20	14700	0.0070	26803,		48/04	2/002	
BRVFDO BR8XEB	14700 14300	8RC070		12100, 27501	10401,	26802,	
	, , , , , ,	8 R C O 8 O	08501,	12100,	18401,	26802,	
		8RC090	26803, 08501,	27501 12100,	18401.	26802,	
			26803,	27501		,	
		8RC800 8RC810		26803, 26803,			
		8RC820		26803,			
		8RC830		26803,			
		8RC840 8RC850		26803, 26803,			
		8RC860	02500,	26803,			
		8RSC6B 8R1XSB	14300,	15001	03800.	06600.	
		OK IX3B		08300,			
				11600,		11800,	
			14300, 15200,	15001,		15100, 26803,	
			27501				
		8R2XCB 8R4XCB	26802, 06600,	26803, 15700.	15800,	26803.	
			27201	/	,	/	
		8R4X60 8R8XAB	15001	14300,	26802	26803	
		0 K Q A M D	28203	. = 5007	20002,	20005,	



Change 3 FO-149. RSU Radar Clock Generator Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
 - ↑ INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
 - TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

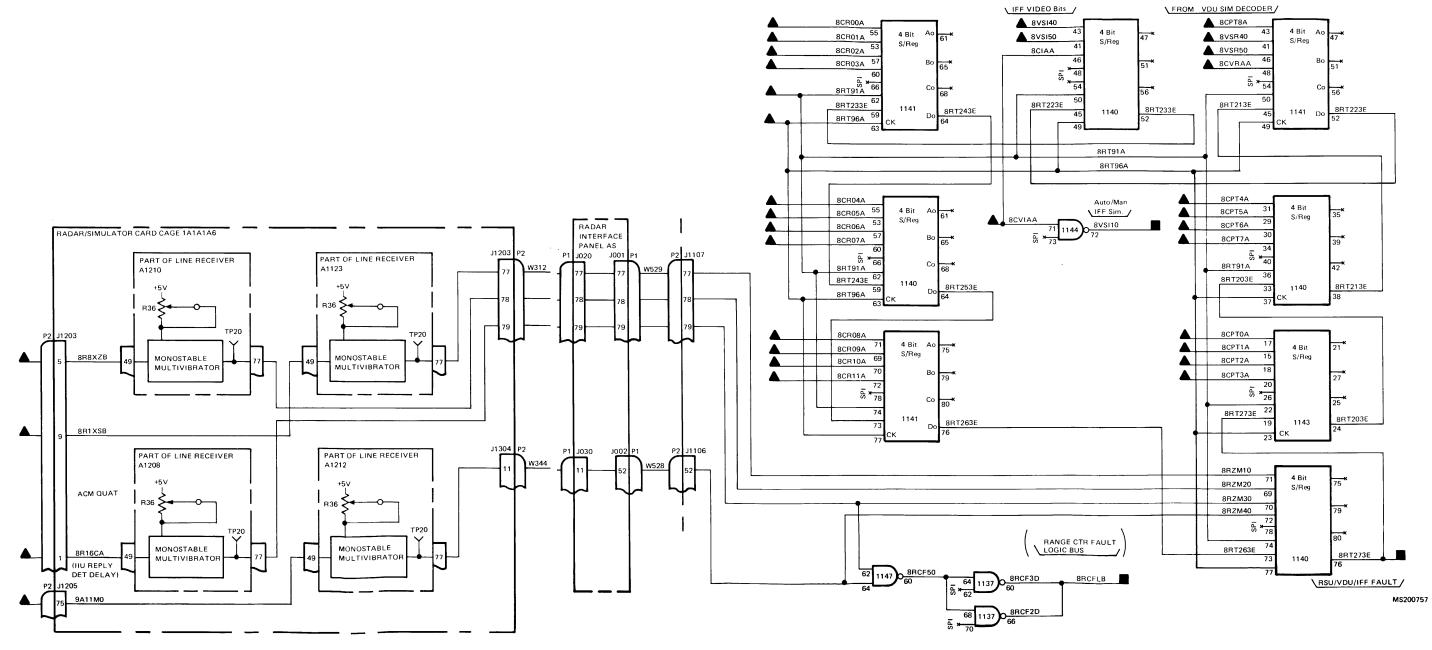
INF	707	0UTP	UT			
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINA FO-SH	TION		
	26803					
ZSINHD4			04700,	.26802,	26803,	27201
ZSINHD4		8R332KQ				
7KRC00V		8R334D4				
7KRC00V	26803	8R335A	18100,	26803		
7KRC01V	26803					
7KRC02V	26803					
8RBT10	14300					
8RLT1R						
8RLT1R	27502					
	14600					
BRSC6B						
8R041A						
	14300					
BR1XSB	00300					
BR1XSB						
BR1XSB						
	26803					
BR1XSB						
3R4X60						
BR8XEB	14300					



Change 3 FO-150 RSU TUP-32/ACM Clock Generator and Error Check Logic Diagram (Sheet 1 of 2)

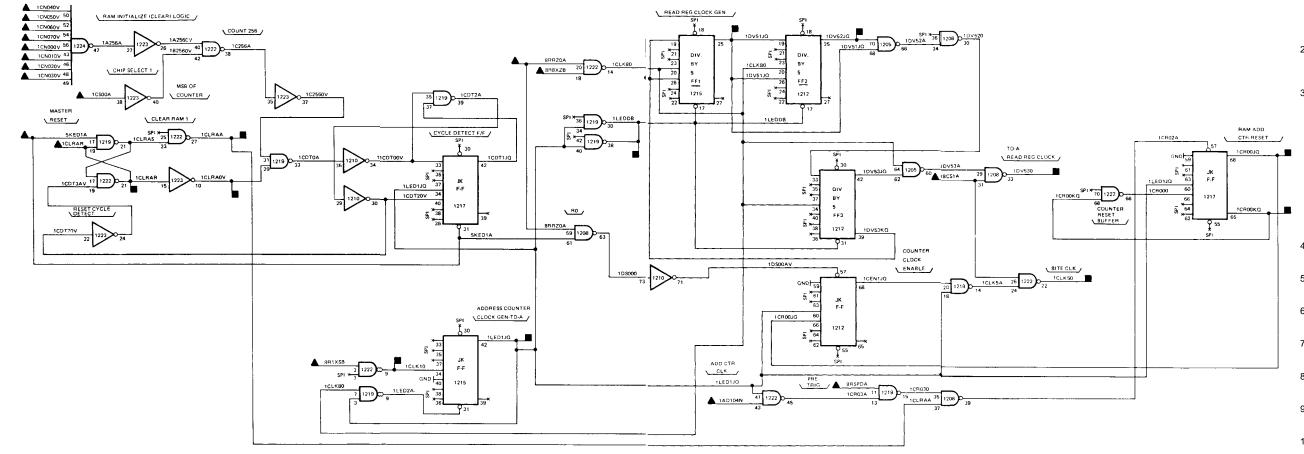
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
 - ↑ INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INF	דטי	INF	PUT	OUTPI	JT	
SIGNAL	SOURCE FO-SH	SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH	
8 C P T 1 A A 8 C P T T 5 A A 8 C P T T 5 A 8 C P T T 5 A 8 C P T T 5 A 8 C P T T 5 A 8 C P T T 5 A 8 C P T T 5 A 8 C P T T 5 A 8 C P T T 8 A 8 C P T 0 A 8 C R 0 0 A 8 C R 0 0 1 A 8 C R 0 0 5 A 8 C R 0 0 5 A 8 C R 0 0 5 A 8 C R 0 0 5 A 8 C R 0 1 A A 8 C R 0 1 A A 8 C R 1 A A A 8 C R 1 A A A 8 C R 1 A A A 8 C R 1 A A A A A A A A A A A A A A A A A A	27101 27101	8 R 8 X Z B 8 V S I 4 O 8 V S I 5 O 8 V S I 5 O 8 V S R 4 O 8 V S R 4 O 8 V S R 5 O 8 V S R 5 O	27201 14000 26901 14000 26803 26901 14000 26803 26901	8RCFLB 8RT273E 8VSI10	26803, 27102 16500 14000	?



FO-150 RSU TPS-32/ACM Clock Generator & Error Check Logic Diagram (Sheet 2 of 2)

	INPU	Т	0	UTPUT		
5	1 GNAL	SOURCE FO-SH	SIGNAL	DESTINA FO-SH	TION	
	1 A D 1 O 4 N 1 B C S 1 A			0 15300 0 15600,		16500
1	1 C N O O O V 1 C N O O O V 1 C N O 1 O V	15600 27701	1CLRA 1CLRA	A 15400, R 15400 OV 16300	15700	.0300
	1 C N O 1 O V 1 C N O 2 O V 1 C N O 2 O V	27701 15600	1 C R O O 1 C R O O	JQ 15600, KQ 15600, JQ 16500	16500	
	1 C N O 3 O V 1 C N O 3 O V 1 C N O 4 O V	27701	1 D V 5 3	JQ 16500 0 16300 B 15400,	15700	
	1 C N O 4 O V 1 C N O 5 O V 1 C N O 5 O V	15600 27701	1LED1	JQ 16500		
	1 C N U 6 U V	15600 27701 15600 27701				
	1 C N O 7 O V 1 C S O O A 1 C S O O A 5 K E D 1 A	15700 27701				
	5KED1A 5KED1A 8RRZOA	26803 31301				
	8RSPDA 8R1XSB 8R1XSB	00300 14900				
	8R1X5B 8R1X5B 8R1X5B 8R8XZB	26803 27501				
	8R8XZB	14300 27201				



Change 3 FO-151. TDU-A Timing Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .

REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP

REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .

. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

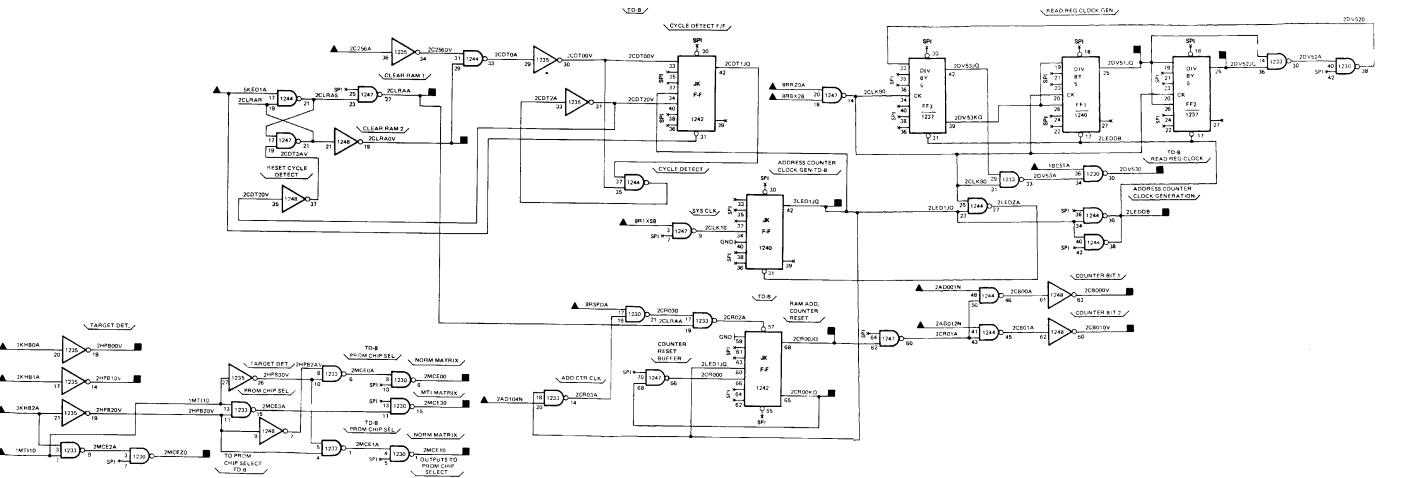
 TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

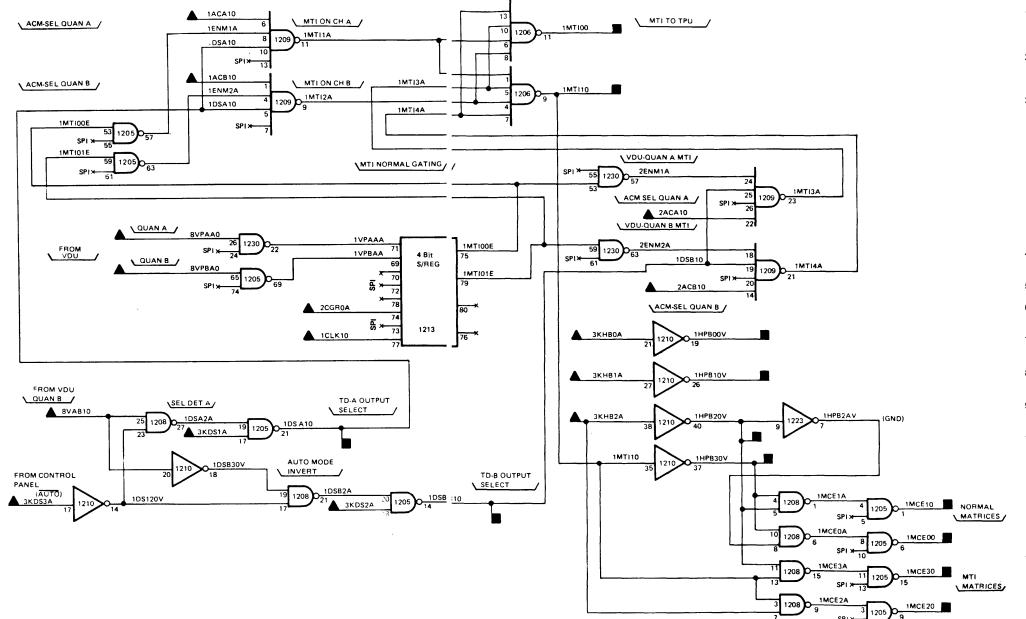
11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



Change 3 FO-152. TDU-B Timing Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- ☐ INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

IN	PUT	OUTP1				
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINA			
140410	15400	1DSA10	16300			
	15400	1DSB10				
	15100		16000,	16500.	26803.	27602
		1HPB10V				
	15500	1HPB20V			,	
		1HPB30V				
	27102	1MCE00		26803,	27602	
•	27102	1MCE10	16000,	26803,	27602	
3KDS3A		1MCE20	16000,	26803,	27602	
3KHBOA	27001	1MCE30	16000,	26803,	27602	
	28901	1MTI00	08502,	16500,	26803,	27502
3KHB1A	27001	1MTI10	15200			
	28901					
3KHB2A	27102					
8 V A B 1 O	13900					
8VPAA0	14100					
8VPBA0	14100					



Change 3 FO-153. TDU MTI and Matrix Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

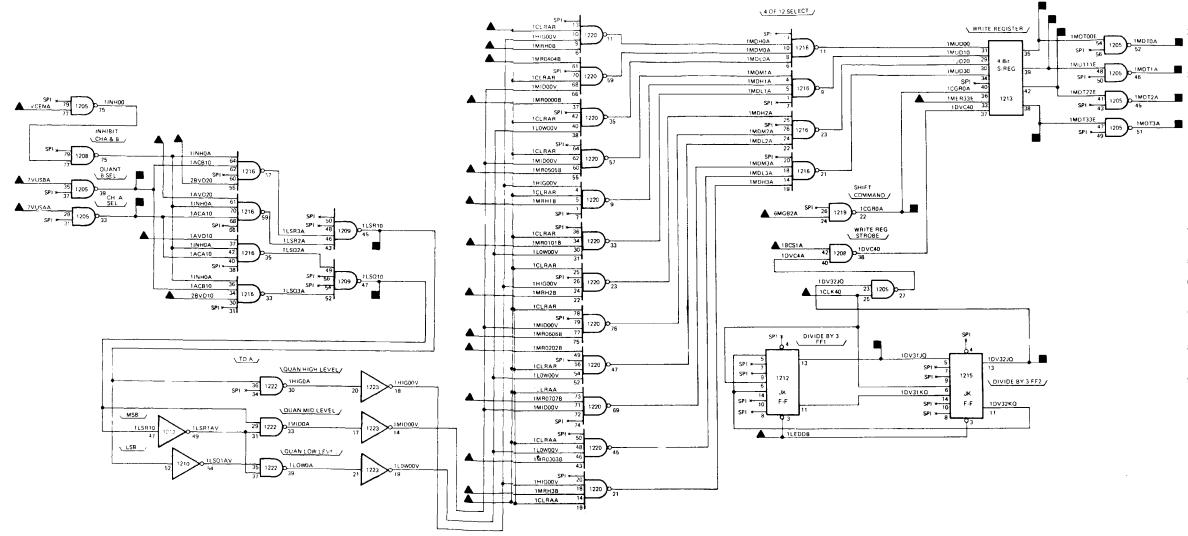
INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

		INF	TUT	OUTPL		
SIGNAL	SOURCE FO-SH	SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION	
1 A V 2 1 0 1 A V 2 1 0 1 A V 2 2 0 1 B C S 1 A 1 C L R A A 1 C L R A A 1 C L R A R 1 L E D D B 1 M R H O B 1 M R H O B 1 M R H 1 B 1 M R H 1 B 1 M R H 2 B 1 M R H 2 B 1 M R H 3 B 1 M R			SOURCE FO-SH		DESTINATION	16300, 16500 27701 27701



Change 3 FO-154. TDU-A Write Register Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

TORAM

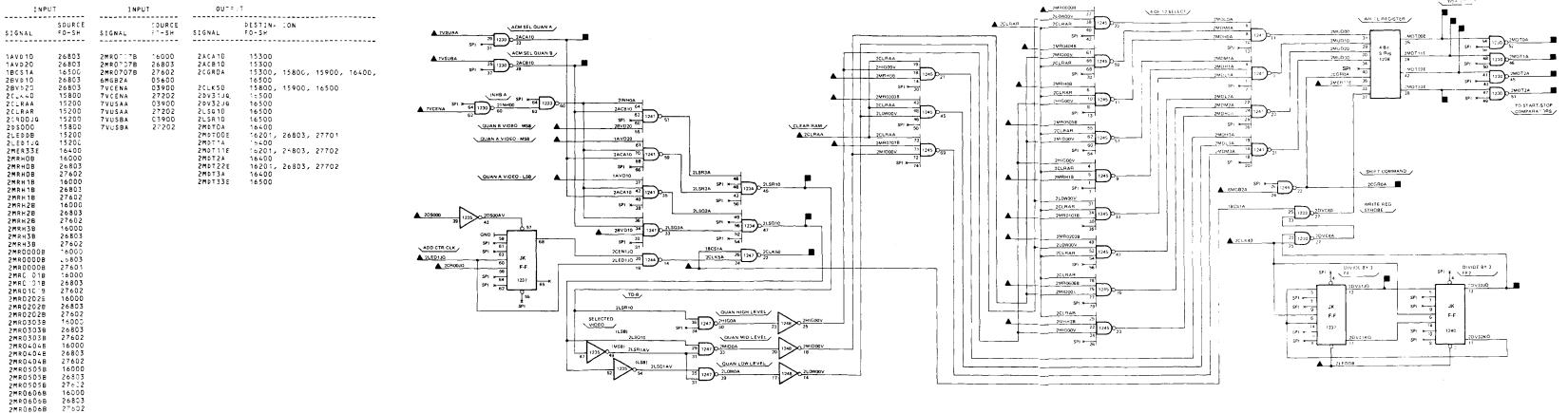
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
 - ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)

REFERENCES ARE AS FOLLOWS:

- INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- . REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - AND CIRCUIT CARD PIN NUMBER

FROM CIRCUIT SYMBOL NOTE CARD LOCATION

- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



Change 3 FO-155. TDU-B Write Register Logic Diagram

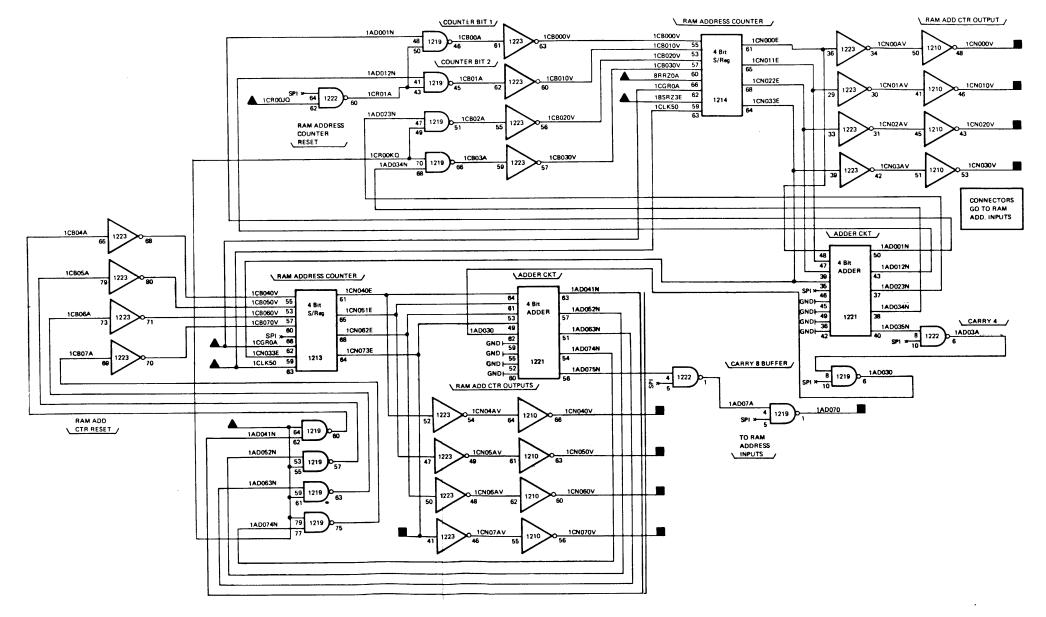
NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOI COMPLETE DESIGNATIONS, PREFIX WITH APPLICABL UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED
 IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- . REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DI POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT

- CARD PIN NUMBERS.
- D. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOF CARDS A1123, A1139, A1149 AND A1227

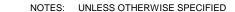
INPUT		OUTPUT				
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	TION		
1BSR23E 1CGR0A 1CLK50 1CR00JQ 1CR00KQ 8RRZ0A	16500 15400 15100 15100 15100 14600	1ADO70 1CN000V 1CN010V 1CN020V 1CN030V 1CN040V 1CN050V 1CN070V 1CN070V	15100, 15100, 15100, 15100, 15100,	16101, 16101, 16101, 16101, 16101, 16101, 16101,	26803, 26803, 26803, 26803, 26803,	27701 27701 27701 27701 27701 27701



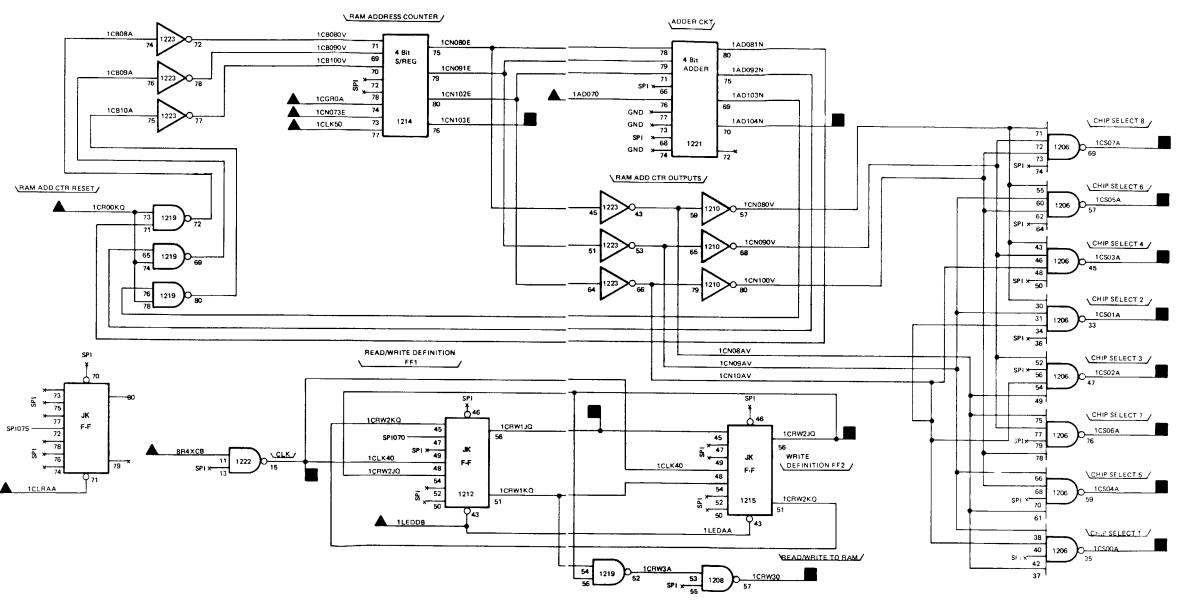
Change 3 FO-156. TDU RAM Address Counter Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
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 - INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
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 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



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- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
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INPUT

SIGNAL

1AD070

1 C G R O A

10LK50

1CLRAA 1CNO73E

1¢R00KQ

1LEDDB

8R4XCB

8R4XCB

8R4XCB

SOURCE

15400

15100

14900

26802 27201 OUTPUT

10LK40

10N103E

1 C R W 1 J Q

1 C R W 2 J G

1 C R W 3 O 1 C S O O A

10501A

1CS02A

10303A 10304A

1 C S O 5 A

10806A 10807A

16101, 26803, 27602 15100, 16104, 26803, 27701 16104, 26803, 27701

16103, 26803, 27701

16103, 26803, 27701

16102, 26803, 27701

16102, 26803, 27701 16102, 26803, 27701 16101, 26803, 27701 16101, 26803, 27701

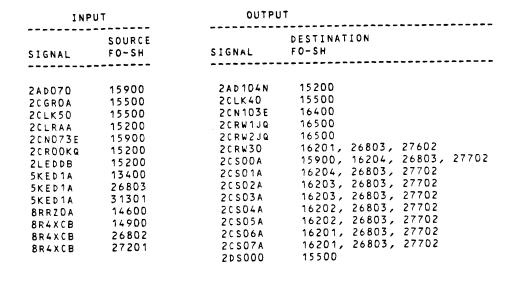
DESTINATION

15400

16300

16500

16500



ALTERNATE

F-F

1237

SWEEP "

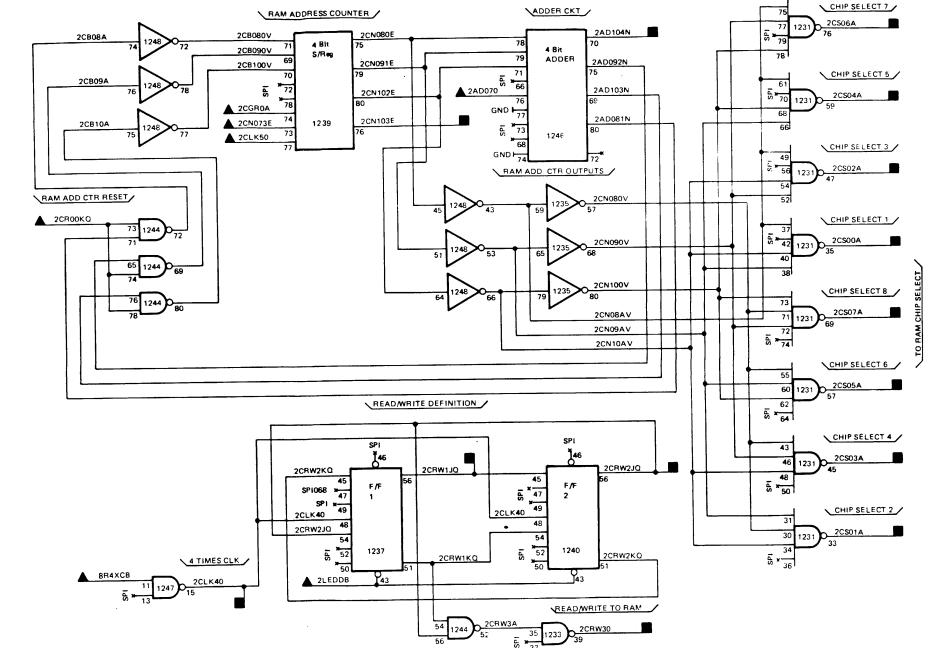
F/F

SP1075 = 72

▲ 2CLRAA

RSU

▲ 5KED1A

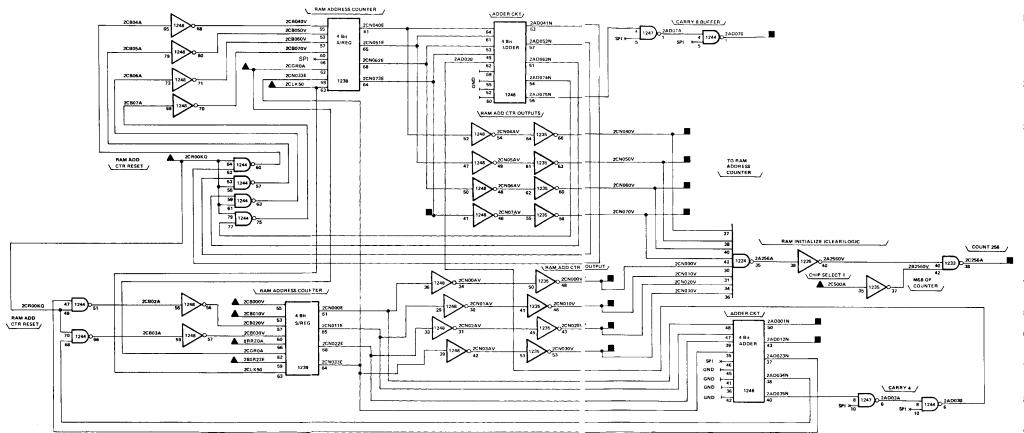


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- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
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- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- D. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
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- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

MS 200765B

INPUT		OUTPL	jΤ		
	SOURCE		DESTINAT	10N	
SIGNAL	F O - S H	SIGNAL	FO-SH		
2B\$R23E	16500	2AD001N	15200		
2 C B O O O V	15200	2 A D O 1 2 N	15200		
2CB010V	15200	2AD070	15800		
2 C G R O A	15500	2 C N O O O V	16201,	26803,	27702
2CLK50	15500	2 C N O 1 O V	16201,	26803,	27702
20R00KQ	15200	2 C N O 2 O V	16201,	26803,	27702
2 C S O O A	15800	2CN030V	16201,	26803,	27702
2 C S O O A	27702	2 C N O 4 O V	16201,	26803,	27702
8RRZOA	14600	2 C N O 5 O V	16201,	26803,	27702
		2 C N O 6 O V	16201,	26803,	27702
		2 C N D 7 D V	16201,	26803,	27702
		2 C N D 7 3 E	15800		
		2C256A	15200		



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INDICATES OUTPUT TO ANOTHER FIGURE

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INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

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REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

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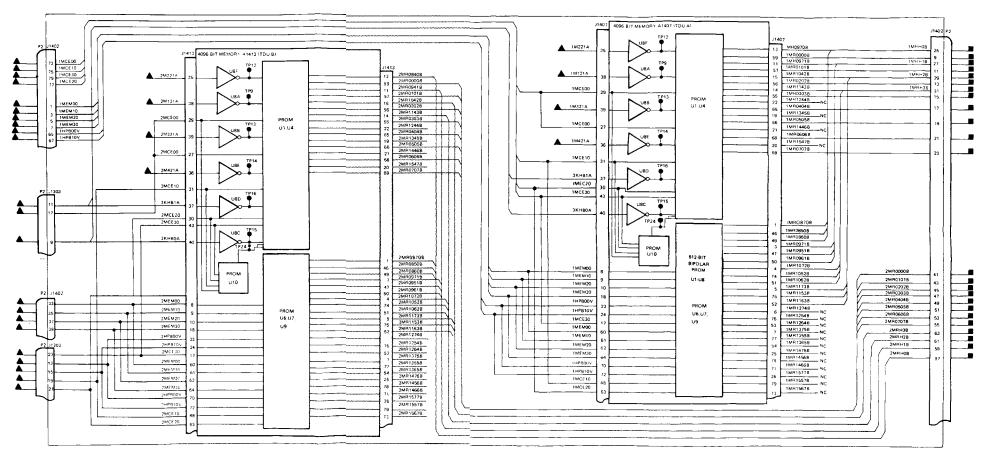
C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

Change 3 FO-159. TDU-B RAM Addressing and Clear Logic Diagram

MS200766A

INP	UΤ	INF	PUT	OUTPL	Т
	SOURCE		SOURCE		DESTINATION
SIGNAL	F 0 - 5 H	SIGNAL	F O - S 11	SIGNAL	F O ~ S H
1HPB00V	15300	2M321A		1MRH08	15400, 27601
1HPB00V	27602	2M421A	16201	1MRH1B	15400, 27601
1HPB10V	15300	3KHBOA	27001	1MRH2B	15400, 27601 15400, 27601 15400, 27601
1HP#10V	27602	3KHB0A	28901	1MRH3B	15400, 27601
1MCE00	15300	3KHB1A	27001	1MR0000B	15400, 27601 15400, 27601
1MCE00		3KHB1A	28901	1MRD 10 1B	15400, 27601
1MCE 10	15300			1MR0202B	15400, 27601 15400, 27601 15400, 27601
1MCE 10	27602			1MR0303B	15400, 27601
1MCE20	15300			1MR0404B	15400, 27601
1MCE20	27602			1MR0505B	15400, 27601 15400, 27601
1MCE30 1MCE30	15300 27602			1MR0505B	
1MEMOO	26803			2MRH0B	
1MEMO0	27601			2MRH1B	15500, 27602
1MEM 10	26803			2MRH2B	15500, 27602
1MEM10	27601			2MRH3B	
1MEM20	26803			2MR0000B	
1MEM20	27601			2MR0101B	
1MEM30	26803			2MR0202B	
1MEM30	27601			2MR0303B	15500, 27602
1M 12 1A	16105			2MR0404B	
1M221A	16104			2MR0505B	15500, 27602
1M321A	16103			2MR0606B	
1M421A	16102			2MR0707B	15500, 27602
2HPB00V	15200				
2HPBDOV	28901				
2HPB 10V 2HPB 10V	15200 28901				
2MCE00	15200				
2MCE00	28901				
2MCE10	15200				
2MCE 10	28901				
2MCE20	15200				
2M1E20	28901				
2MCE30	15200				
2MCE30	28901				
2MEM00	26803				
2MEM00	27601				
2MEM10	26803				
2MEM10	27601				
2MEM20	26803				
2MEM20	27601				
2MEM30	26803				
2MEM30	27601				
2M121A	16204				
2M221A	16203				



NOTES: UNLESS OTHERWISE SPECIFIED

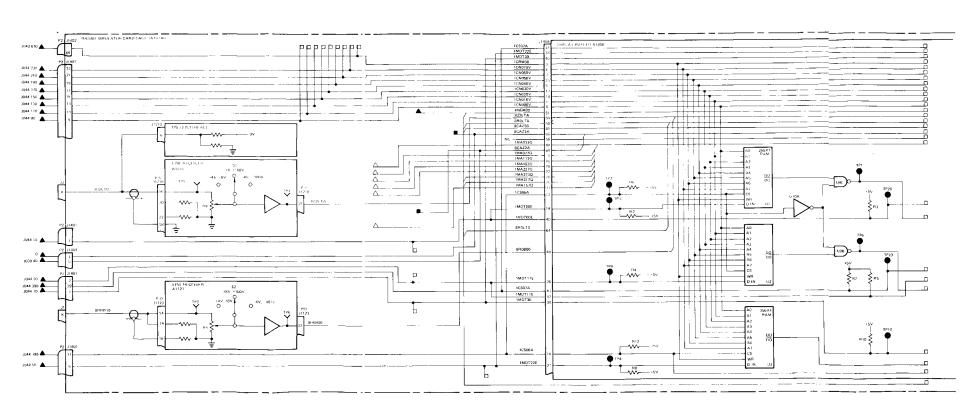
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 RSU BAY 1 CARD CAGE (1A1A1A4.)
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- 5. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

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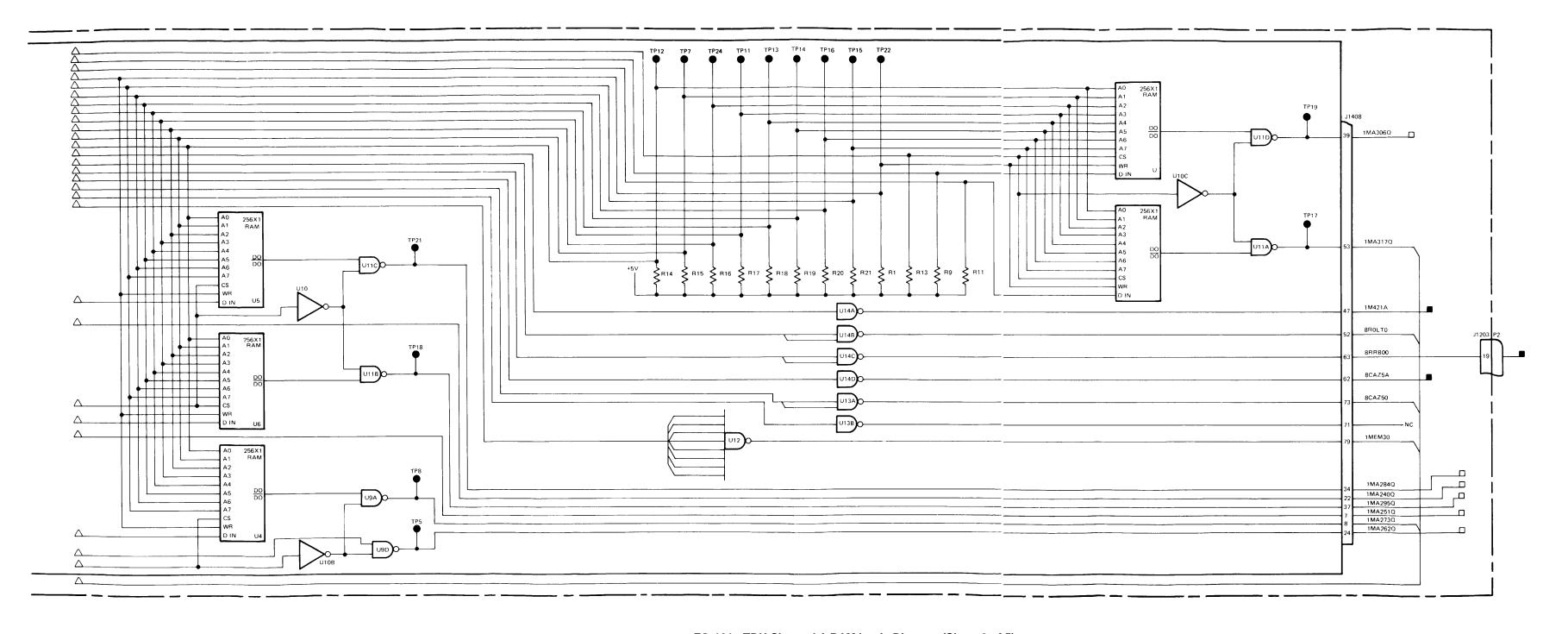
Change 3 FO-160. TDU PROM Logic Diagram

INPUT					
	SOURCE				
SIGNAL	F O - S H				
1 C N O O O V	15600				
1 C N O O O V	27701				
1 (NO 10 V	15600				
10 NO 10 V	27701				
10N020V	15600				
10N020V	27701				
1 C N O 3 O V	15600				
1 C N D 3 D V	27701				
1CN040V	15600				
1 C N D 4 D V	27701 15600				
10N050V 10N050V	27701				
1CN050V	15600				
10N060V	27701				
1 C N O 7 O V	15600				
1 C N O 7 C V	27701				
1CRW30	15700				
1CRW30	27602				
16506A	15700				
10506A	27701				
108074	15700				
108074	27701				
1MDT00E	15400				
1MDT005	27701				
1MD T 1 1E	15400				
1MDT11E	27701				
1MDT22E	15400				
1MDT22E	27701				
1MDT30	16300				
1MDT30	27701 26803				
1MEM30 1MEM30	26803				
BCAZZA	27802				
8CAZ3A	27802				

16000 16600, 27802, 30102 14500

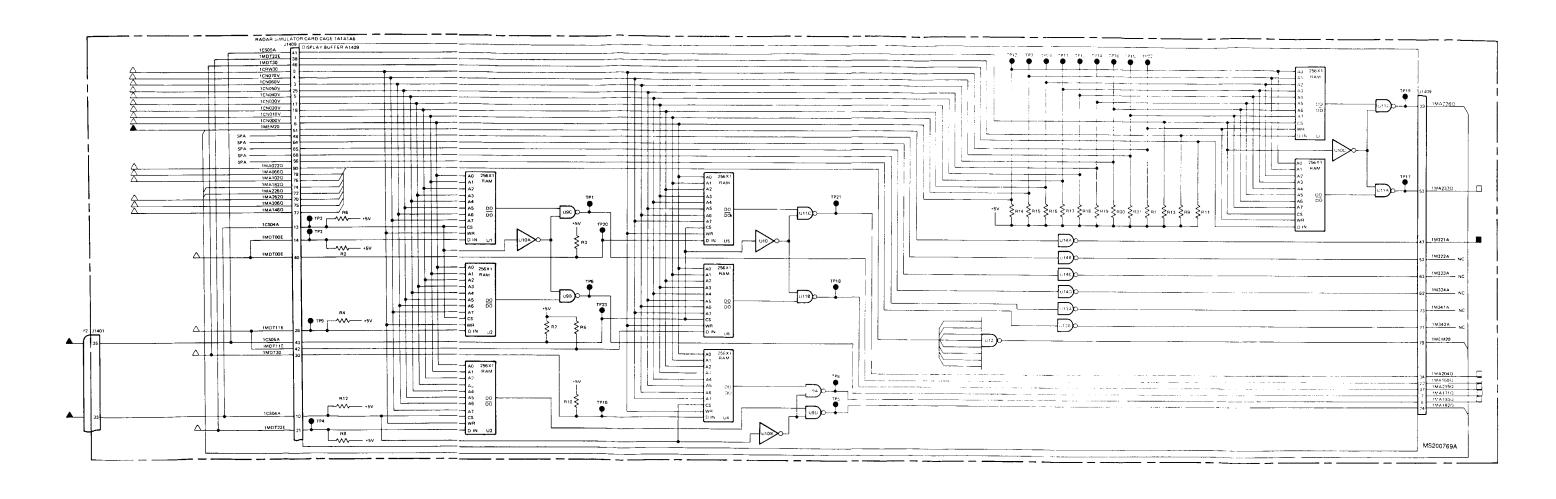


- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A6.)
- 3. REFER to table 5-2 FOR KEY SIGNAL LOOK UP LISTING
- 4. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 5. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.



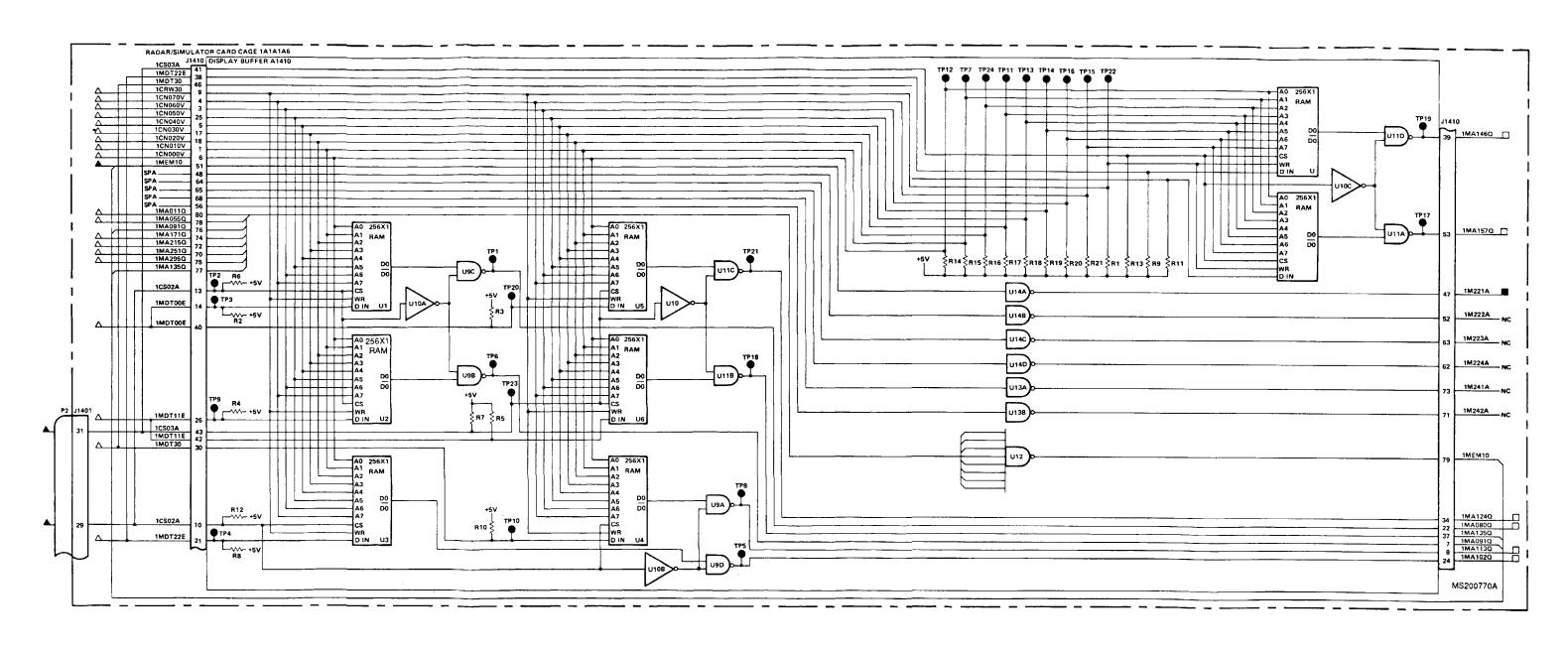
FO-161. TDU Channel A RAM Logic Diagram (Sheet 2 of 5)

INPUT		CUTPUT	
*	SOURCE		DESTINCTION
SICNAL	F0-SH	SIGNAL	FO-S-
10804A 10804A 10805A 10805A 1MEM20 1MEM20	15700 27701 15700 27701 26803 27601	1M321A	16000



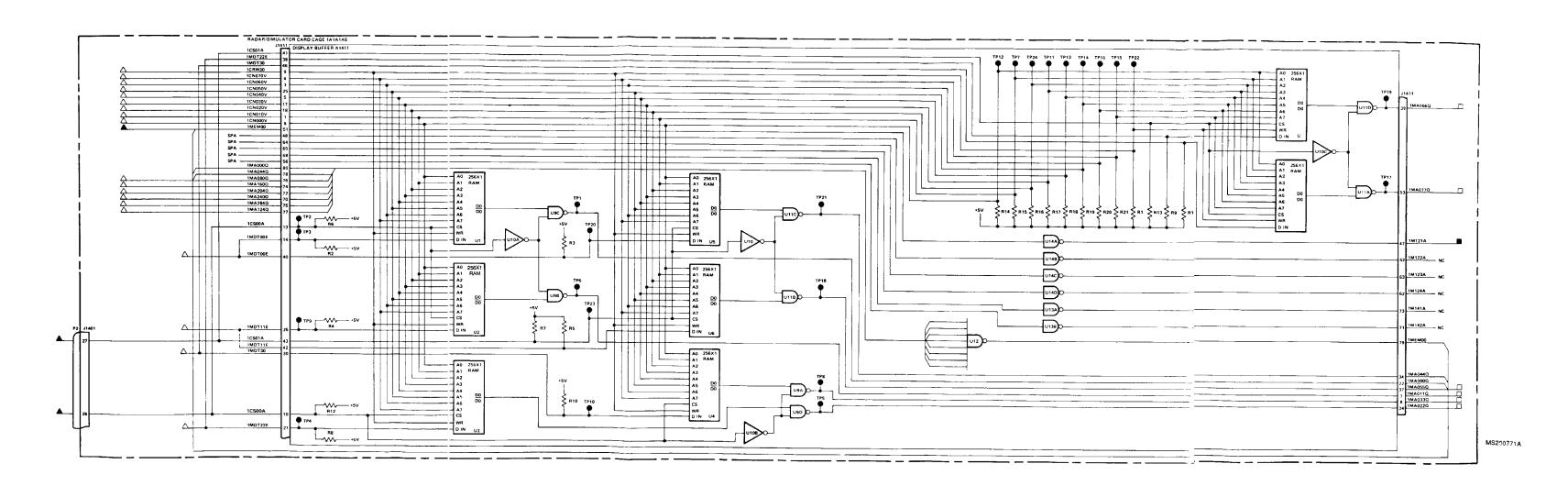
Change 3 FO-161. TDU Channel A RAM Logic Diagram (Sheet 3 of 5).

INF	דטי	OUTP	υ ፣
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
1 C S O 2 A 1 C S O 2 A 1 C S O 3 A 1 C S O 3 A 1 M E M 1 O 1 M E M 1 O	15700 27701 15700 27701 26803 27601	1M221A	16000



Change 3 FO-161. TDU Channel A RAM Logic Diagram (Sheet 4 of 5).

INPUT		OUTPUT		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH	
10500A 10500A	15700 27701	1 M 121A	16000	
10501A 10501A	15700 27701			
1MEM00 1MEM00	26803 27601			



Change 3 FO-161. TDU Channel A RAM Logic Diagram (Sheet 5 of 5).

1 N P U T S O U R C E	OUTPUT DESTINATION	2CS07A J14	TOR CARD CAGE 1A1A1A6 DISPLAY BUFFER A1414
SIGNAL F0-SH	2M421A 16000	772 J1401 MOT28 M	177 1 1114 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

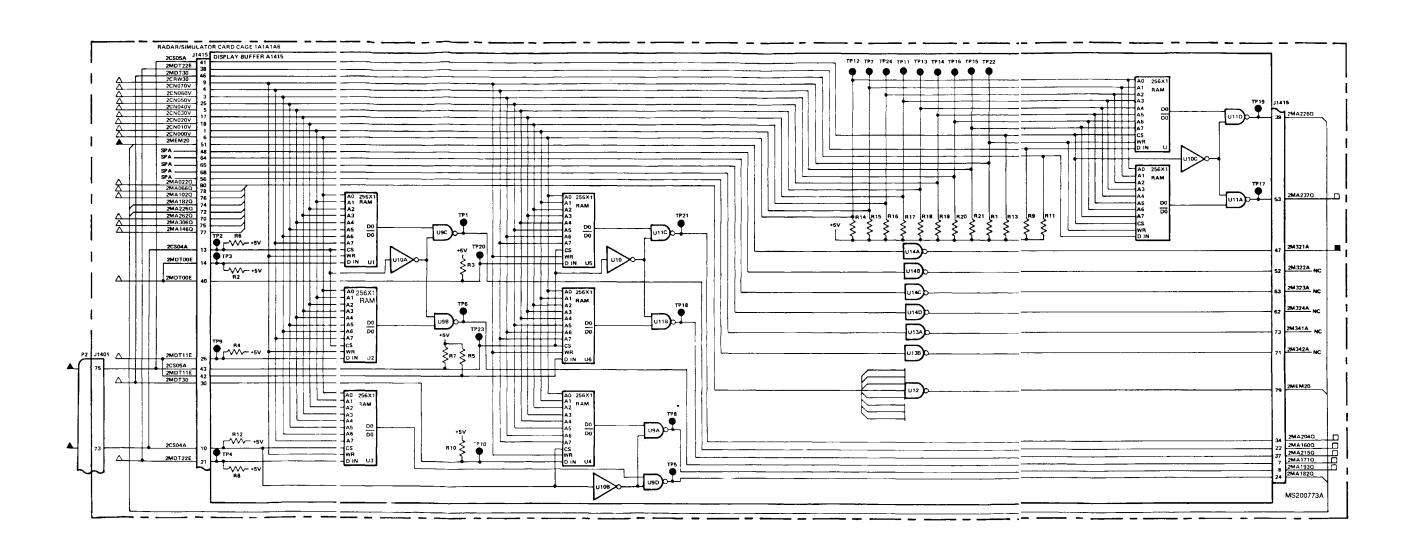
Change 3 FO-162. TDU Channel B RAM Logic Diagram (Sheet 1 of 4).

NOTES: UNLESS OTHERWISE SPECIFIED

- . PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6.)
- 3. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING:
- 4. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 5. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS

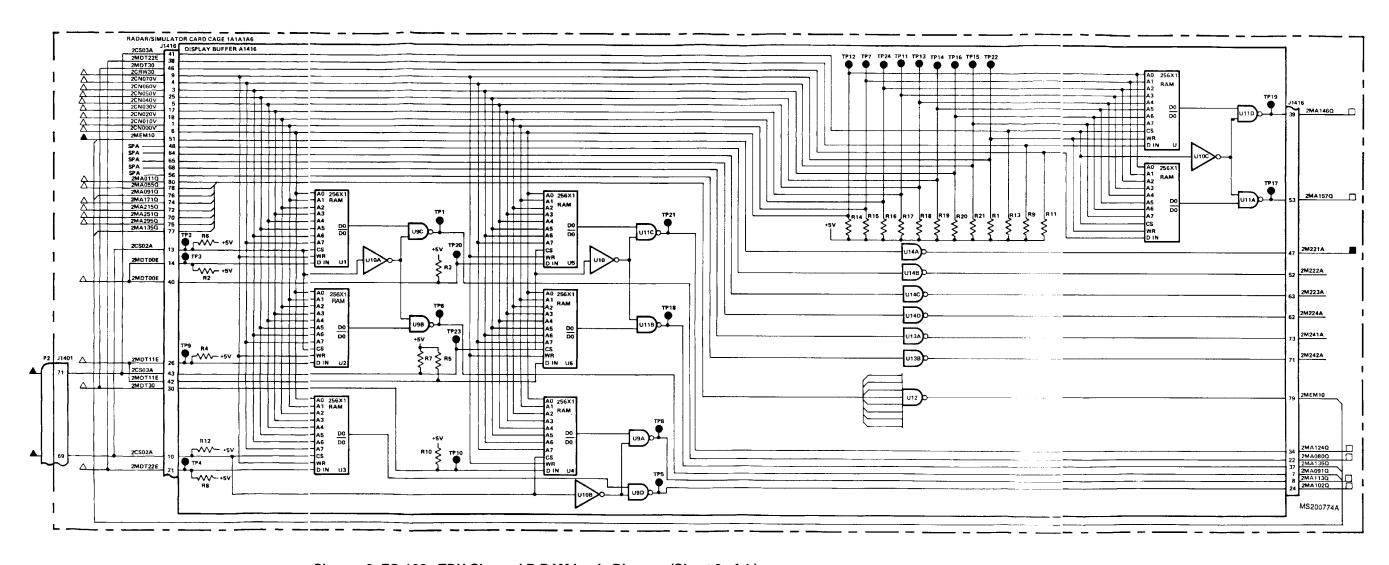
MS200772A

INPUT		0 t TP	TUT
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
2 C S O 4 A 2 C S O 4 A	15800 27702	2M321A	16000
2 C S O 5 A 2 C S O 5 A	15800 27702		
2MEM20 2MEM20	26803 27601		



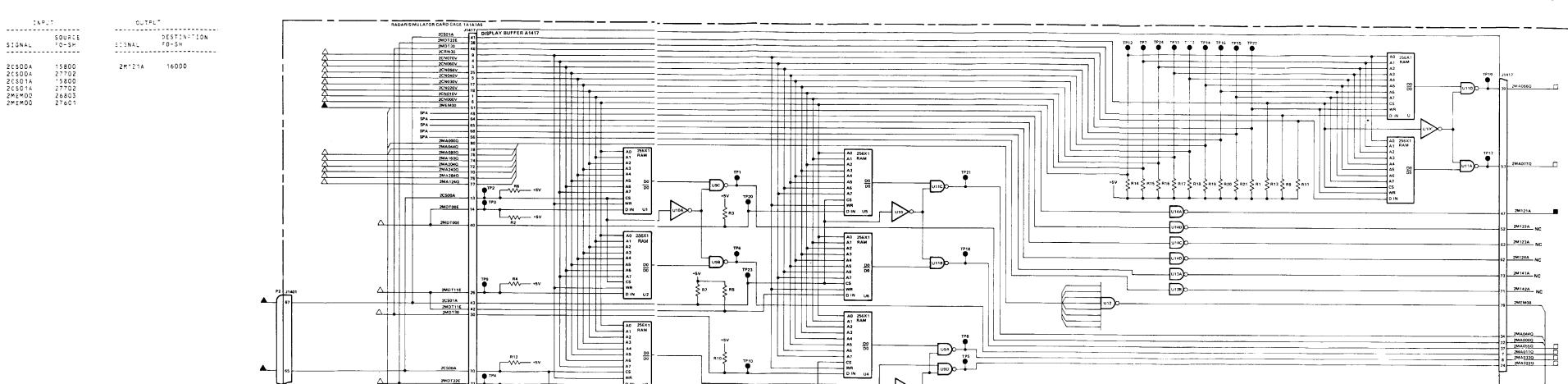
Change 3 FO-162. TDU Channel B RAM Logic Diagram (Sheet 2 of 4).

INPUT		OUTPUT		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH	
26802A 26802A 26803A 26803A 26803A 2MEM10 2MEM10	15800 27702 15800 27702 26803 27601	2M221A	16000	



Change 3 FO-162. TDU Channel B RAM Logic Diagram (Sheet 3 of 4).

MS2007 75A



Change 3 FO-162. TDU Channel B RAM Logic Diagram (Sheet 4 of 4)

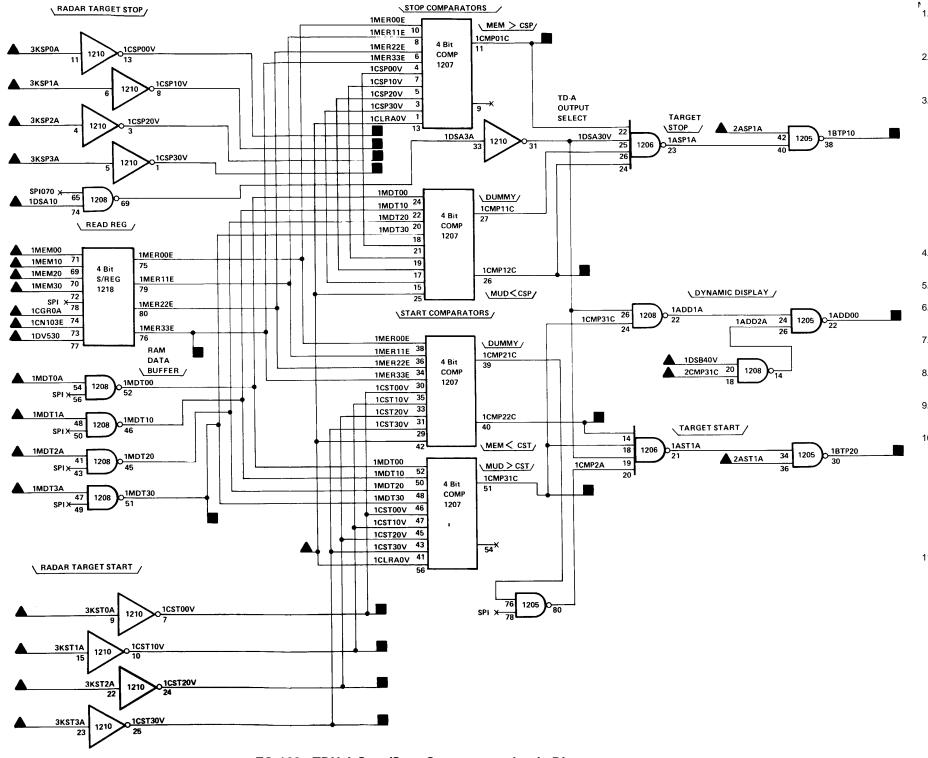
INP	UΤ	0UTPU	T			
SIGNAL	SOURCE FO-SH		DESTINAT FO-SH	TION		
	15400 15100	1 A D D O O	08502, 26803,	11200,	16500,	26802
	15100 15700 15300	1BTP10	08502, 26803,	11200, 27502		
1DSB40V 1DV530	16400 15100	1BTP20 1CMP01C	16500	16500,	26803,	27502
1MDTOA 1MDT1A	15400	1 CMP 12 C 1 CMP 22 C	16500 16500			
1MDT2A 1MDT3A	15400	1 C M P 3 1 C 1 C S P O O V 1 C S P 1 O V	16500 16500 16500			
1MEM00 1MEM00 1MEM10	26803 27601 26803	1CSP20V 1CSP30V	16500 16500			
1MEM10		1 C S T O O V 1 C S T 1 O V	16500 16500			
1MEM20 1MEM30	27601 26803	1 C S T 2 O V 1 C S T 3 O V	16500	24907	27701	
1MEM30 2ASP1A 2AST1A	27601 16400 16400	1MD 130 1MER33E	16101, 15400	20003,	27701	
2CMP31C 3KSPOA	16400 27002					
3KSP1A 3KSP2A	27002 27002					
3KSP3A 3KST0A	27002 27002					
3KST1A	27002					

27002

27002

3KST2A

3KST3A



FO-163. TDU-A Start/Stop Comparators Logic Diagram

TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

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 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

△ INDICATES INPUT FROM THE SAME FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .

5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .

7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

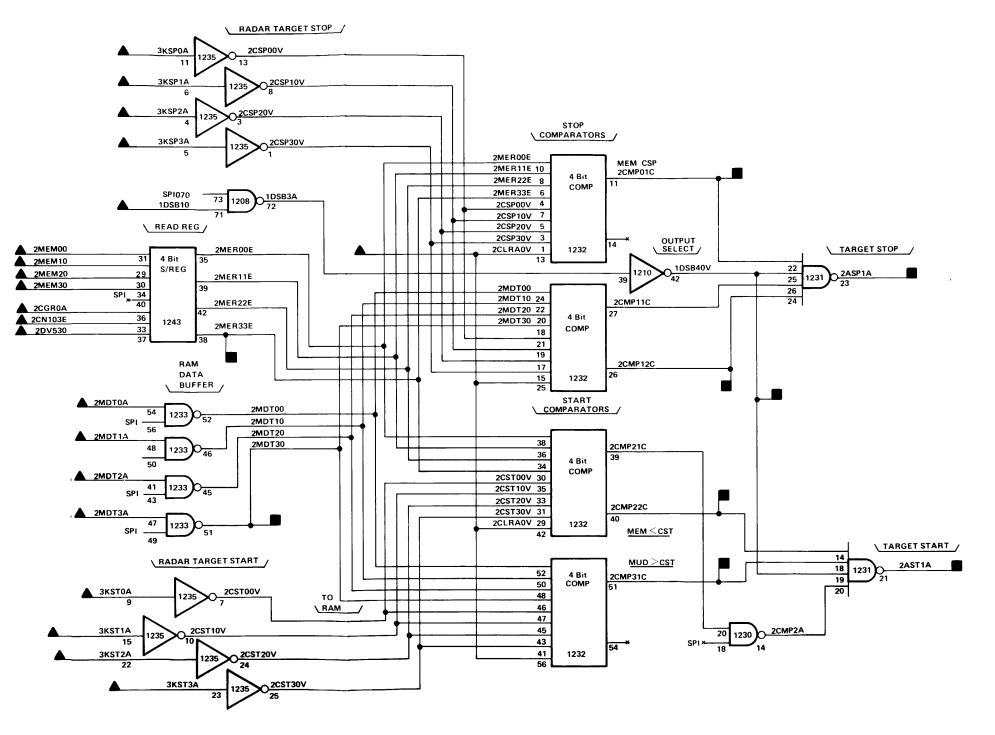
B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

MS200776A

INPUT		OUTP	JT	
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATI FO-SH	0 N
1 D S B 1 O 2 C G R A O V 2 C L R A O V 2 C L R A O V 2 C N 1 O 3 E 2 D V 5 3 O 2 M D T O A 2 M D T T 2 A 2 M D T T 3 A 2 M E M O O 2 M E M 1 O 2 M E M 2 O 2 M E M 3 O 3 K S P P O A 3 K S S P 3 O 3 K S S P T O A 3 K S S T T A 3 K S T T A 3 K S T T A 3 K S T T A 3 K S T T A 3 K S T T A	15500 15200 15800 15200 15500 15500 15500 26803 27601 26803 27601 26803 27601 26803 27601 27601 27002 27002 27002 27002 27002 27002 27002 27002	1DSB40V 2ASP1A 2AST1A 2CMP01C 2CMP12C 2CMP21C 2CMP31C 2MDT30 2MER33E	16300 16300 16500 16500 16500 16300, 1	6500 6803, 27702



FO-164. TDU B Start/Stop Comparators Logic Diagram

TM 9-1430-655-20-3-5

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

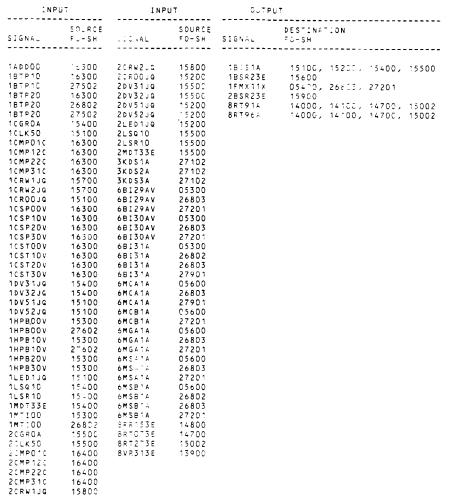
△ INDICATES INPUT FROM THE SAME FIGURE

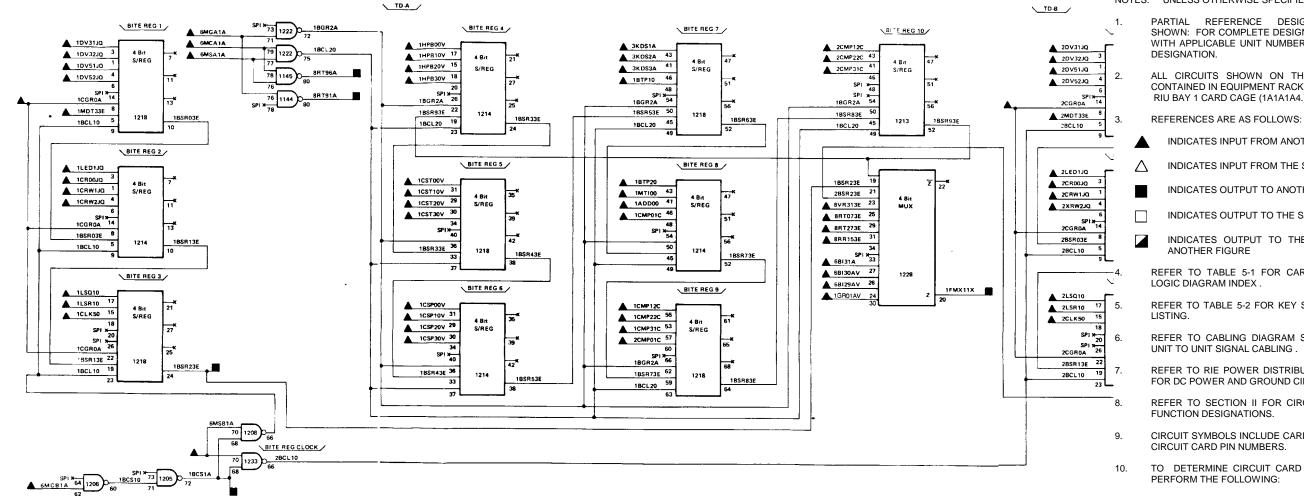
INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- S. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1227 AND A2332.





PARTIAL REFERENCE DESIGNATIONS ARE SARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIXINS. WITH APPLICABLE UNIT NUMBER AND ASSEMBLYIBER AND DESIGNATION.

ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.) R FIGURE.

E FIGURE. INDICATES INPUT FROM ANOTHER FIGURE INDICATES INPUT FROM THE SAME FIGURE INDICATES OUTPUT TO ANOTHER FIGURE INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE REFER TO TABLE 5-1 FOR CARD LOCATION IN UND

REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP ARD LISTING.

REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.

REFER TO RIE POWER DISTRIBUTION DIAGRAMS TO LOCATION FOR DC POWER AND GROUND CIRCUITS.

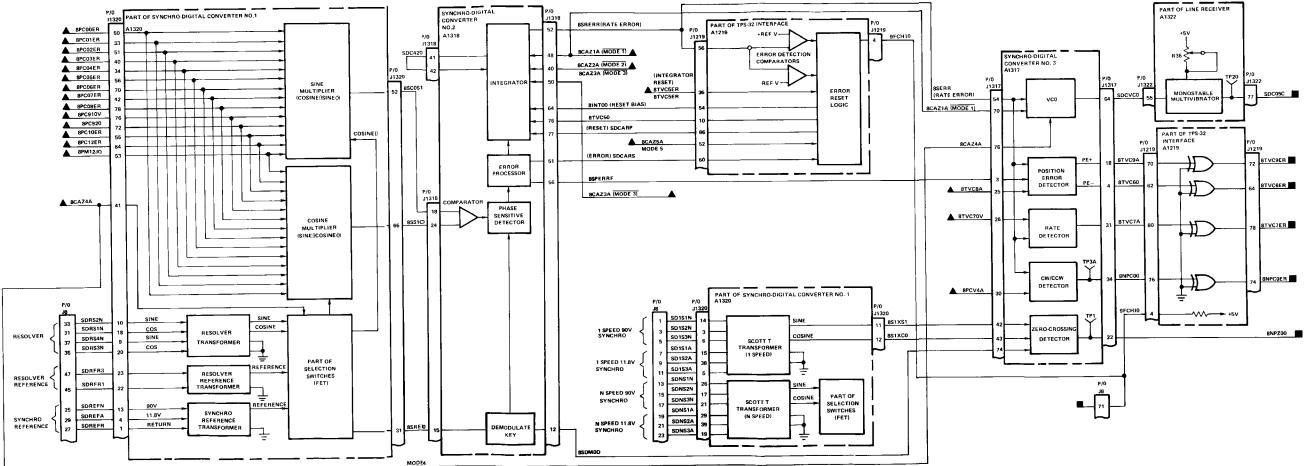
REFER TO SECTION II FOR CIRCUIT CARD CHIP, IN/TEST POINT FUNCTION DESIGNATIONS.

CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND 175 RESISTOR CIRCUIT CARD PIN NUMBERS.

TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

- FROM CIRCUIT SYMBOL NOTE CARD MS 200778A LOCATION AND CIRCUIT CARD PIN NUMBER
- REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INPU	T	INP	υT	OUTP	UT	
SIGNAL	SOURCE FO-SH	SIGNAL	SOURCE FO-SH		DESTINATION FO-SH	
SDNS2NN SDNS2NN SDNS2NN SDNREFR3 SDRFFR3 SDRFFR3 SDRFS2NN SPCOODSEERR	28001 26001 26001	8PC10ER 8PC10ER 8PC10ER 8PC10ER 8PC12ER 8PC12ER 8PC12ER 8PC910V 8PC910V 8PC910V 8PC920 8PC920 8PM12JQ 8PM12JQ 8PM12JQ 8PM12JQ 8PM12JQ 8TVC5ER 8TVC5ER 8TVC70V 8TVC70V 8TVC70V 8TVC70V 8TVC8A	SOURCE FO-SH		26803 26803 16800, 26803, 2 26803 26803	
8PCOBER	28802					

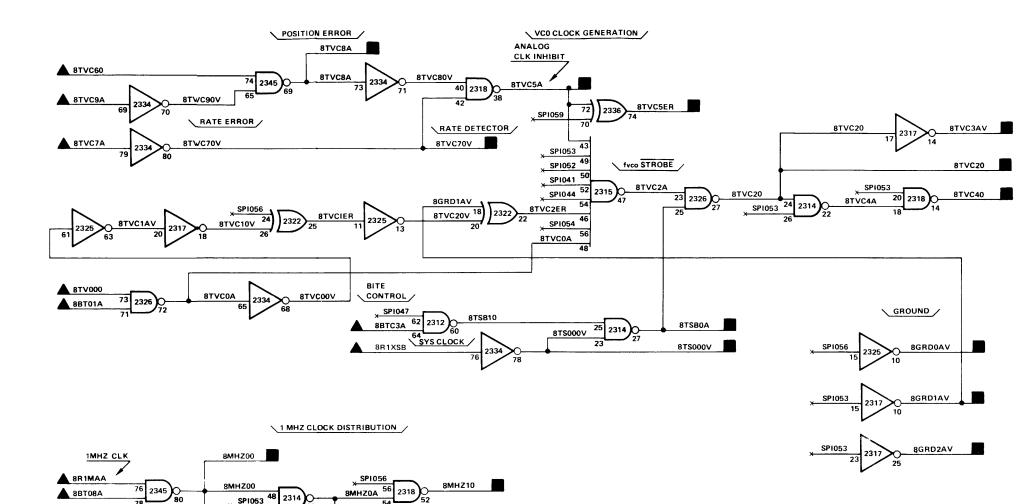


FO-166. SDC Interface Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
 - ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 8. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAMS INDEX
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 5. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- S. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

INPUT	OUTPL	I T			
SOURCE SIGNAL FO-SH	SIGNAL	DESTINAT FO-SH	ION	- 	
8BTC3A 28401	8 G R D O A V	17700		ŕ	17400,
8BT01A 26803 8BT01A 28401	8 G R D 1 A V 8 G R D 2 A V		17101,	17200 17600,	17700
8BT08A 26803		17800,	17900	17600,	17700,
	8MHZAAV 8MHZBAV		17900		
	8MHZOA		48000		
	8MHZ 00 8MHZ 10			17300,	17700,
8R1XSB 26802	0 M U 7 O A	17800,	17900		•
- · · · · · · · · · · · · · · · · · · ·	8MHZ2A 8TSBOA				
	8TS000V				
	8 T V C 2 O 8 T V C 3 A V				
	8TVC40				
8TVC9A 28702	8 T V C 5 A 8 T V C 5 E R 8 T V C 7 O V 8 T V C 8 A	16600, 16600,	26803, 26803, 26803,	28702	



FO-167. SDC Clock Generator Circuit Logic Diagram

8MHZ00

TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:

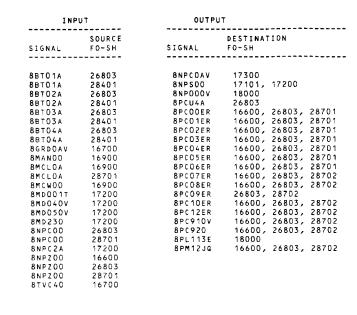
INDICATES INPUT FROM ANOTHER FIGURE

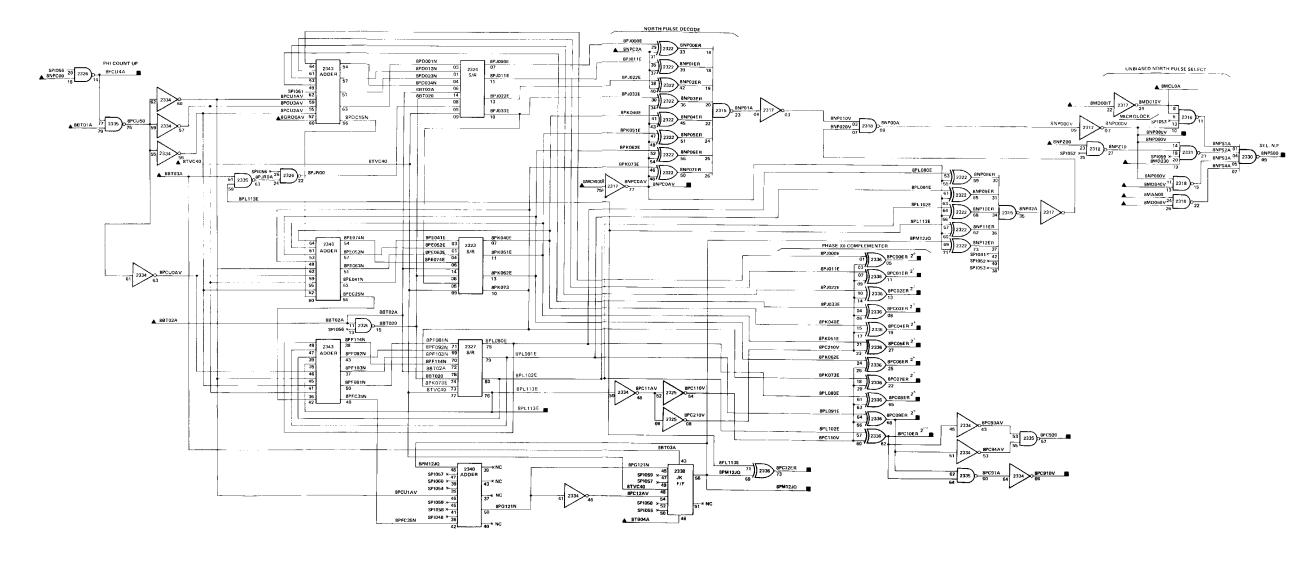
INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1227AND A2332.





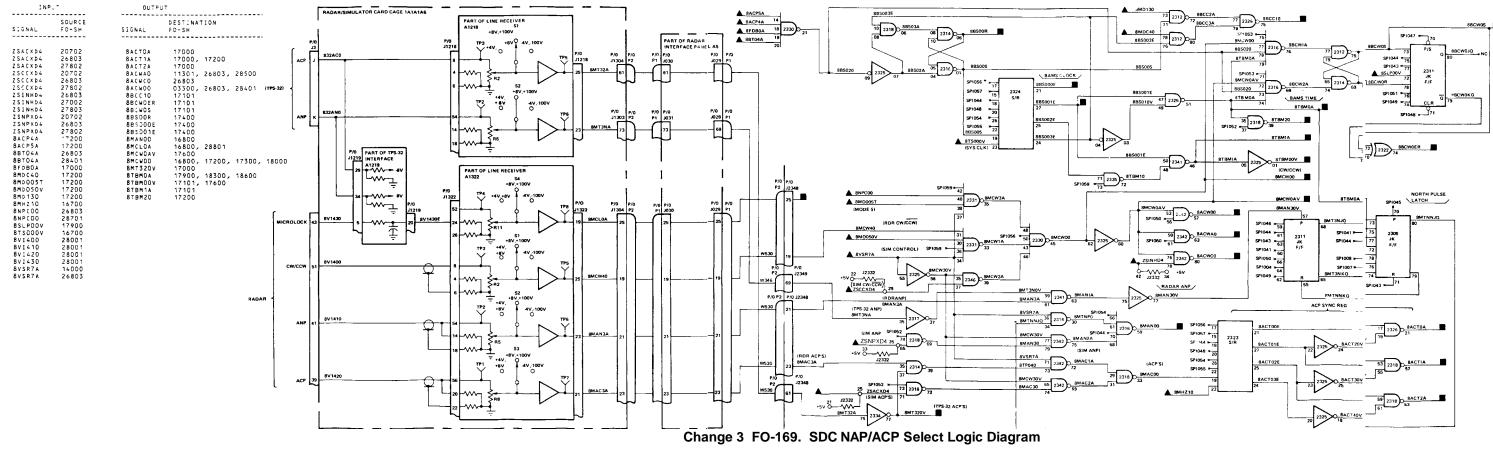
FO-168. SDC Phase Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

DIAGRAM INDEX.

- INDICATES INPUT FROM ANOTHER FIGURE
- ↑ INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- ANOTHER FIGURE

 REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

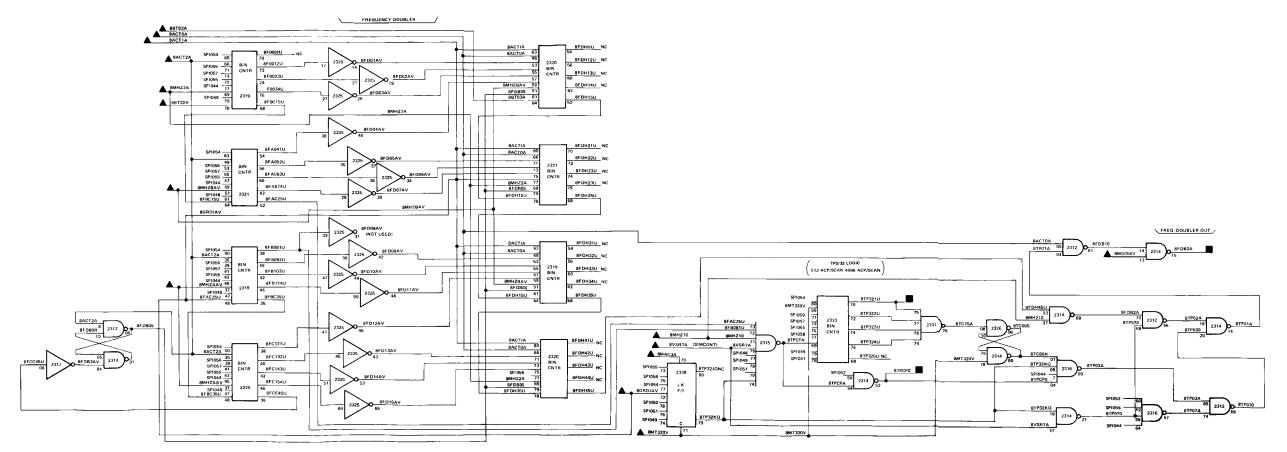


- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE

 - INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

MS200783A

INP	UΤ	OUTPL	T T t
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
BACTOA	16900	8FDBOA	
BACT1A	16900	8TPCP0	17200
BACT2A	16900	8TP321U	17200
8BT02A	26803		
8BTO2A	28401		
8BT03A	26803		
8BT034	28401		
8GRD1AV	16700		
8 M A C 3 A	28701		
8MD050V	17200		
8MHZAAV	16700		
8MHZBAV	16700		
8MHZ 10	16700		
8MHZ2A	16700		
8MT320V	16900		
8VSR7A	14000		
BVSR7A	26803		



FO-170. SDC Frequency Doubler Logic Diagram

- I. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

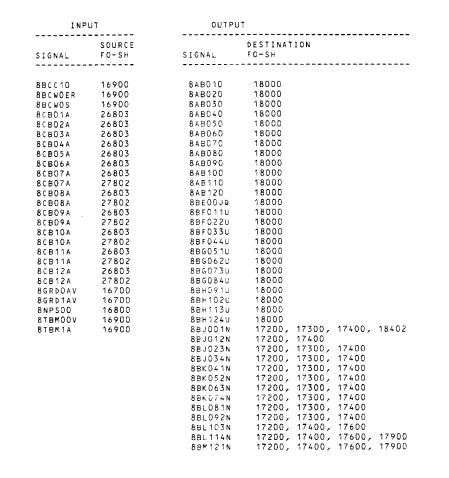
↑ INDICATES INPUT FROM THE SAME FIGURE

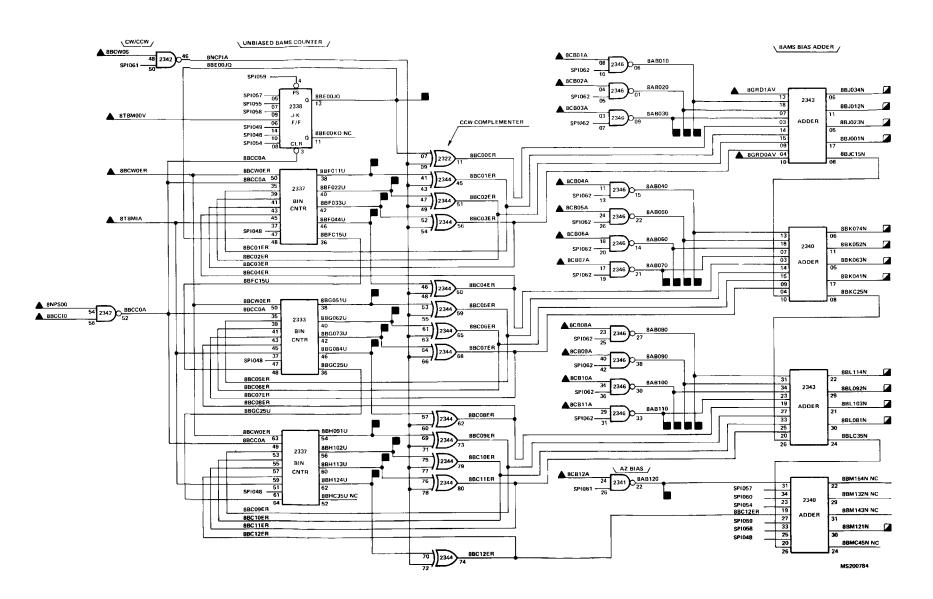
INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

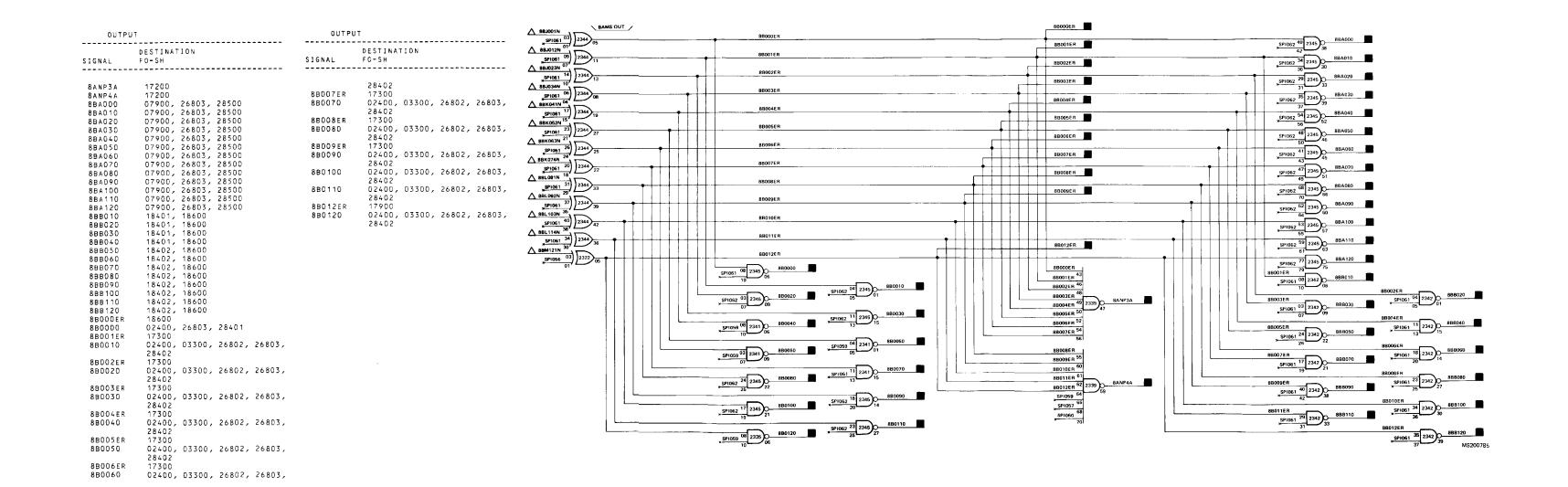
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.



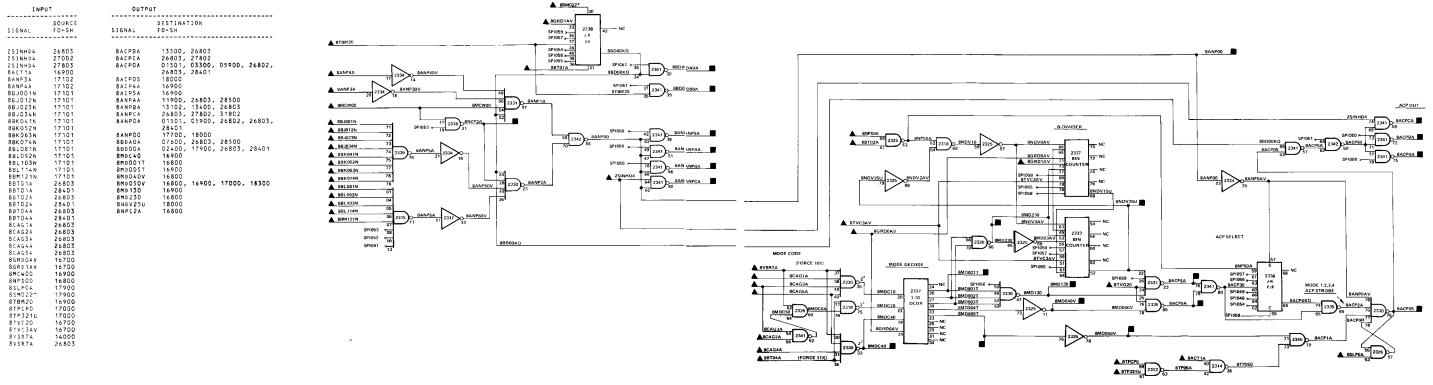


FO-171. SDC BAMS Counter and Adder Logic Diagram (Sheet 1 of 2)

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.



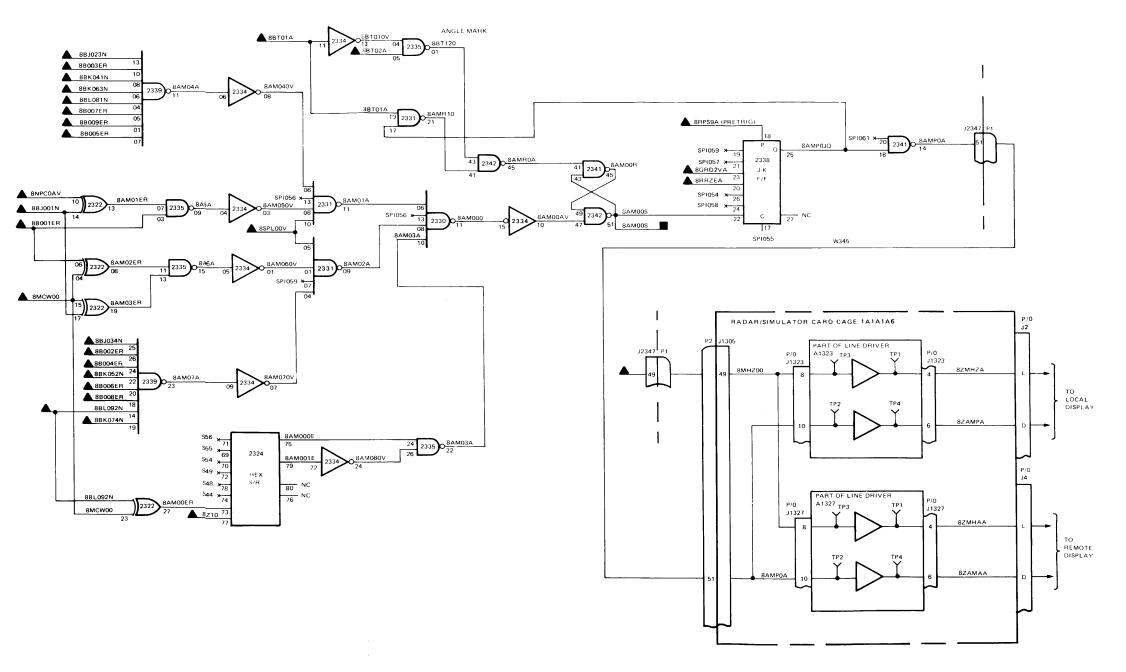
MS200785



FO-172. SDC ANP/ACP Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- ↑ INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

INPUT		OUTPI	UΤ
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
8BJ001N 8BJ0023N 8BJ0034N 8BK0052N 8BK0052N 8BK0052N 8BK0074N 8BL091A 8BL091A 8BT001A 8BT001ER 8B0001ER 8B0005ER 8B0005ER 8B0005ER 8B0005ER 8B0005ER 8B0005ER 8B0007ER 8B0008MHZ10 8MHZ10	17 101 17 101 17 101 17 101 17 101 17 101 17 101 17 101 17 101 17 101 26 803 28 401 26 803 28 401 26 803 28 401 17 102 17	8 A M O O S	18000
8RRZEA 8SPL00V	26803 17900		



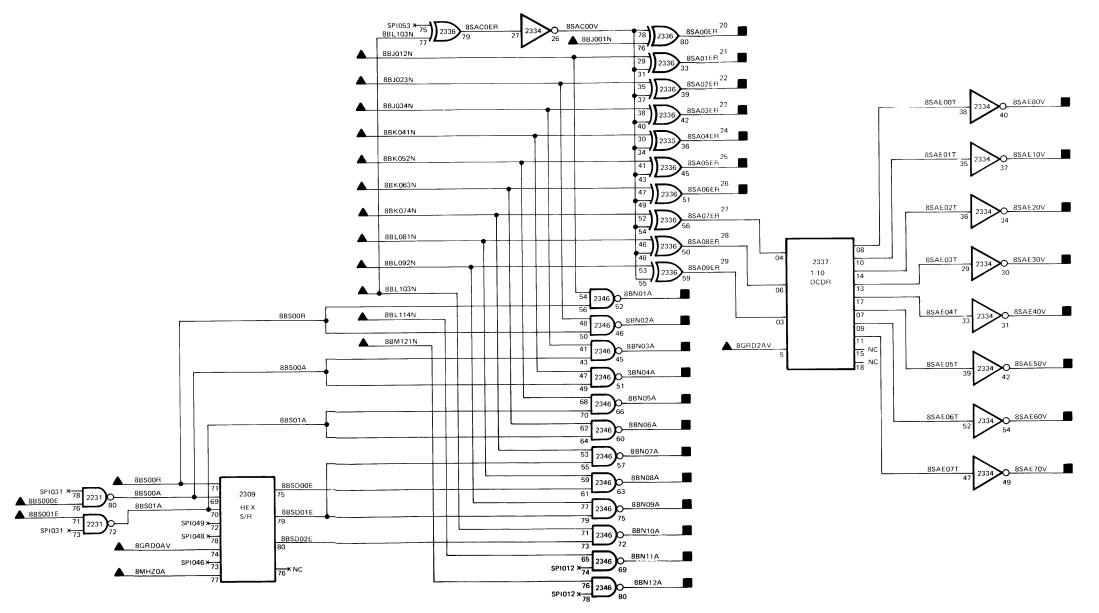
FO-173. SDC Angle Mark Generator Logic Diagram

TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INP	UT	OUTPU	T		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT		
8BJ001N 8BJ012N 8BJ023N 8BJ023N 8BK052N 8BK052N 8BK063N 8BK063N 8BL081N 8BL081N 8BL103N 8BL103N 8BL104N 8BS000E 8BS0001E 8BS0001E 8BS001E	17101 17101 17101 17101 17101 17101 17101 17101 17101 17101 17101 17101 16900 16900 16900 16700	8BN01A 8BN02A 8BN02A 8BN04A 8BN05A 8BN06A 8BN07A 8BN09A 8BN10A 8BN11A 8BN11A 8BN11A 8BN12A 8SAE10V 8SAE20V 8SAE20V 8SAE40V 8SAE50V 8SAE40V 8SAE50V 8SAE40V 8SAE50V 8SAE60V 8SAE70V 8SA	26803, 26803, 26803, 26803, 26803, 26803, 26803, 26803, 26803, 17500, 17500, 17500, 17500, 17500, 17500, 17500, 17500, 17500, 17500, 17500, 17500, 17500,	27801 27801 27801 27802 27802 27802 27802 27802 27802 27802 27802 27800 18000 18	26803 26803 26803 26803 26803 26803 26803 26803 26803 26803 26803 26803

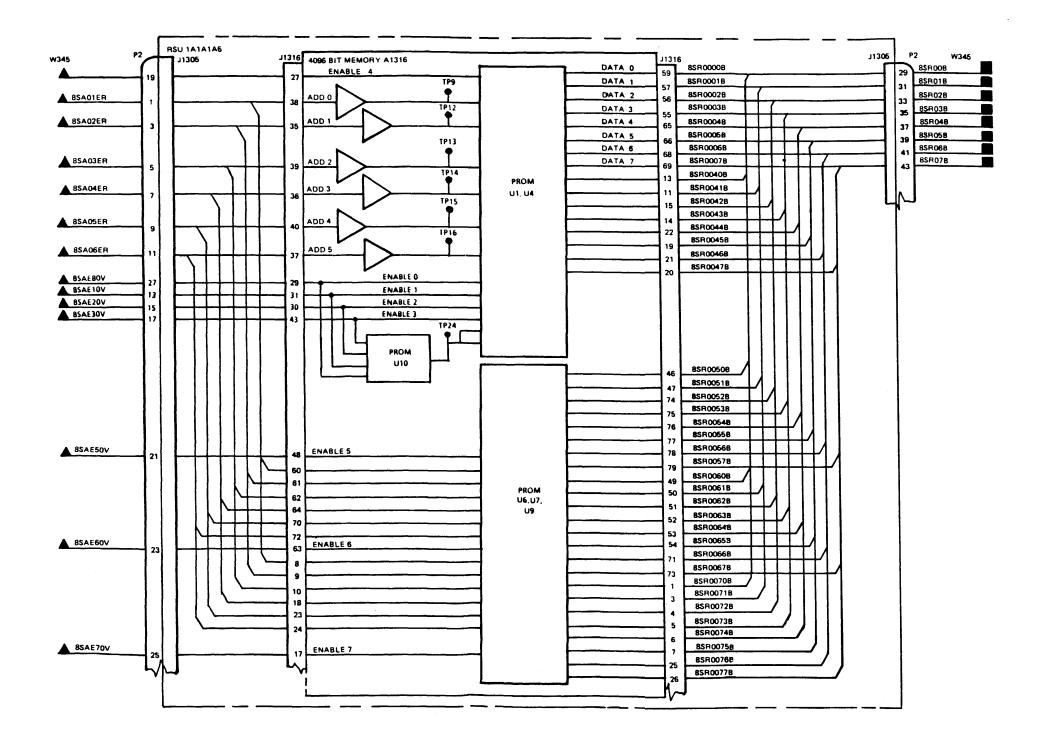


FO-174. SDC Memory Address and Enable Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE

 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
 - INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INPUT		0 UTP	UΤ		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINA FO-SH	TION	
8 S A E 10 V 8 S A E 20 V 8 S A E 30 V 8 S A E 40 V 8 S A E 50 V 8 S A E 60 V	17400 17400 17400 17400 17400 17400	8 S R O O B 8 S R O 1 B 8 S R O 2 B 8 S R O 3 B 8 S R O 4 B 8 S R O 5 B	17600,	18000, 18000, 18000,	26803 26803 26803 26803
8 S A E 7 O V 8 S A E 8 O V 8 S A O 1 E R 8 S A O 2 E R 8 S A O 3 E R 8 S A O 4 E R 8 S A O 5 E R 8 S A O 6 E R	17400 17400 17400 17400 17400 17400 17400	85R06B 85R07B		18000,	26803

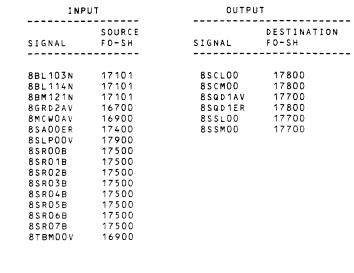


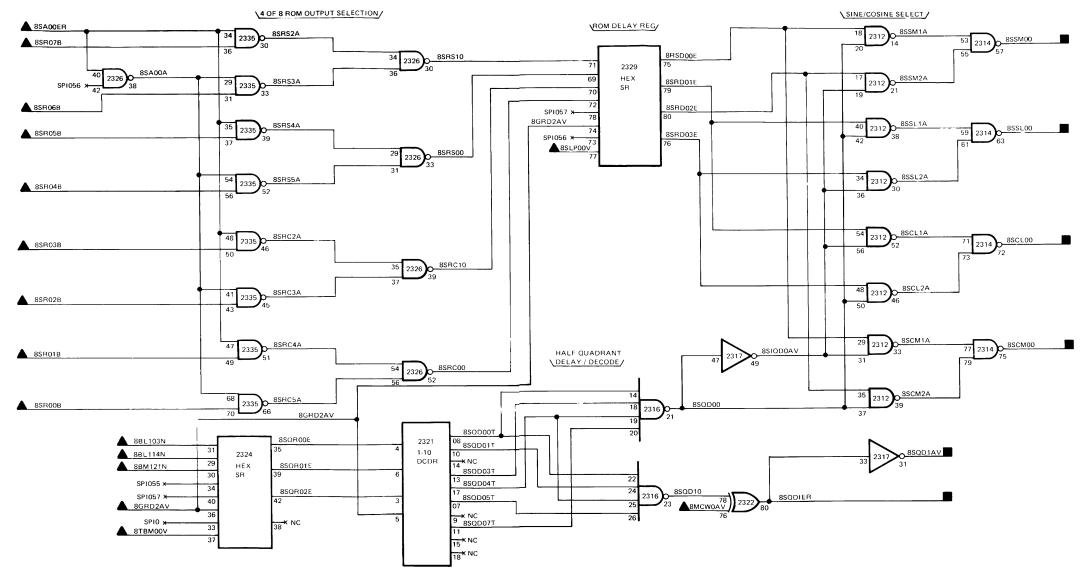
Change 3 FO-175. SDC BAMS Memory Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6.)
- 3. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 5. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 6. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

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FO-176. SDC Sine/Cosine Select Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

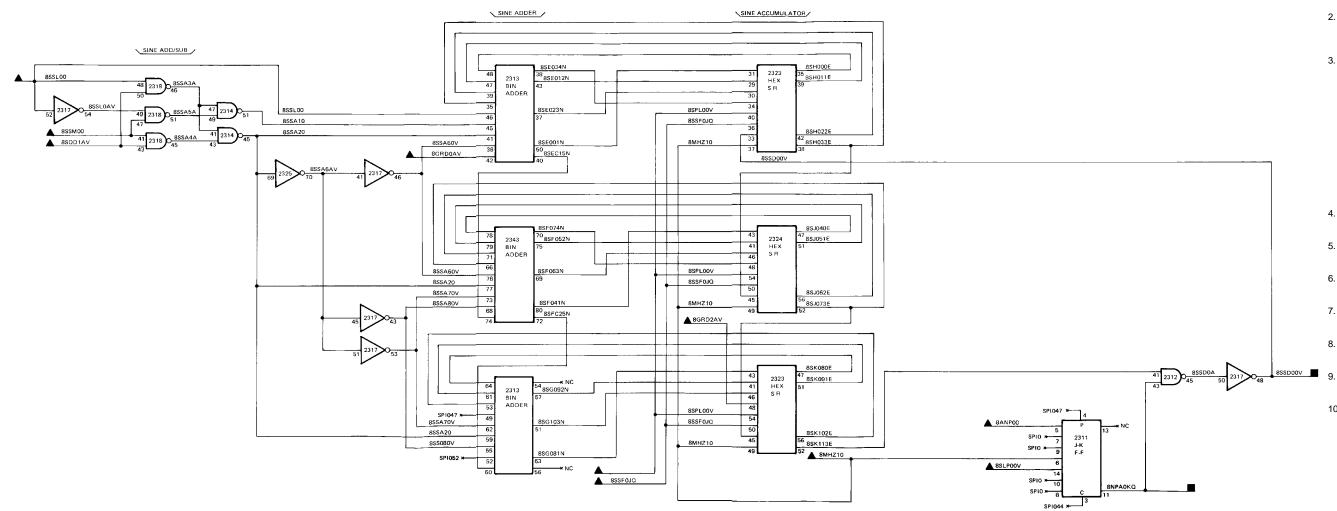
INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INPUT		ОШТРИТ		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH	
8 A N P O O 8 G R D O A V 8 G R D 2 A V 8 M H Z 1 O 8 S L P O O V 8 S Q D 1 A V 8 S S F O J Q 8 S S L O O 8 S S M O O	17200 16700 16700 16700 17900 17900 17600 17600 17600	8NPAOKQ 8SSDOOV	17800 17900	



FO-177. SDC Sine Add/Subtract Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

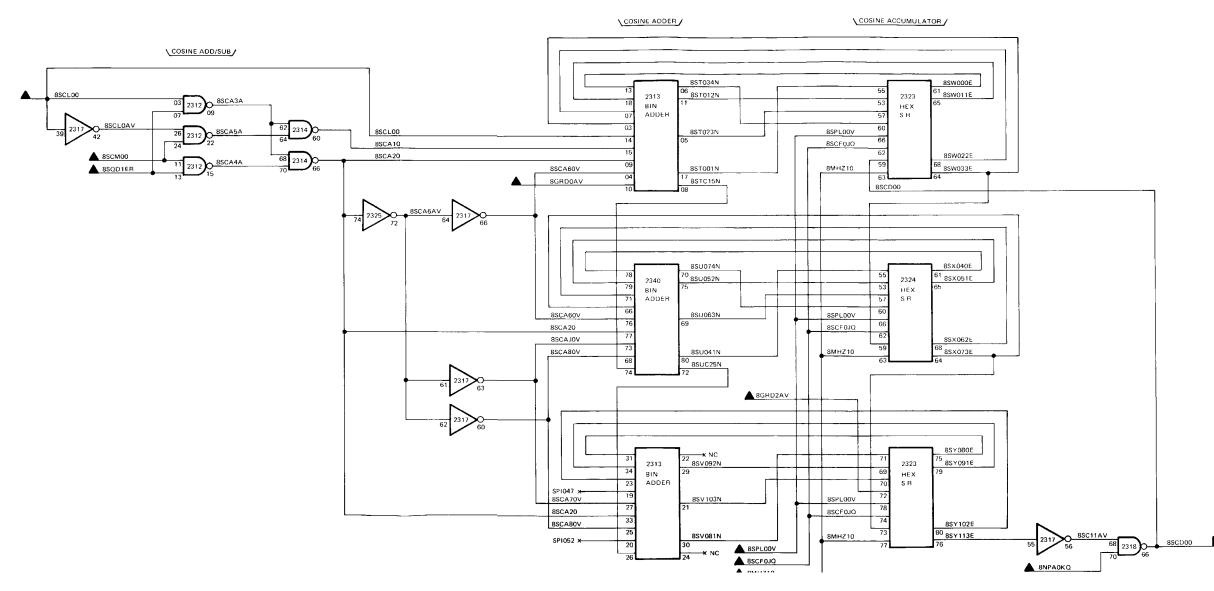
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE

 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- UNIT TO UNIT SIGNAL CABLING .

REFER TO CABLING DIAGRAM SECTION XII FOR

- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

INPUT		OUTP	UT
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
8GRD2AV	16700	8 S C D O O	17900
8MHZ 10	16700		
8NPAOKQ	17700		
8SCFDJQ	17900		
85CL00	17600		
8 S C M O O	17600		
8SPL00V	17900		
8SQD1ER	17600		



FO-178. SDC Cosine Add/Subtract Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- N:2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

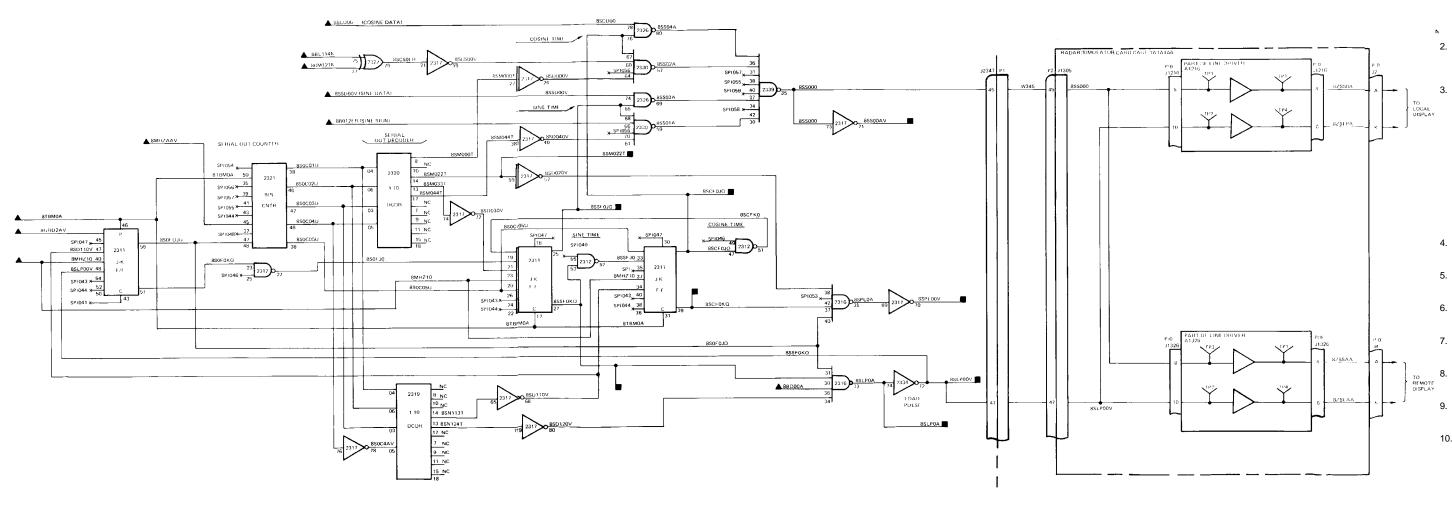
↑ INDICATES INPUT FROM THE SAME FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



INPUT

SIGNAL

ADDOA

8BDOOA 8BDOOA 8BDOOA 8BL 114 N 8BM 121N 8BO 12ER 8GRD 2AV 8MHZ AAV 8MHZ AAV 8MHZ AOO 8SSDOOV 8TBMOA

OUTPUT DESTINATION FO-SH

17800 18000 17200 16900, 17600, 17700 17300, 17700, 17800 17700 18000

SIGNAL

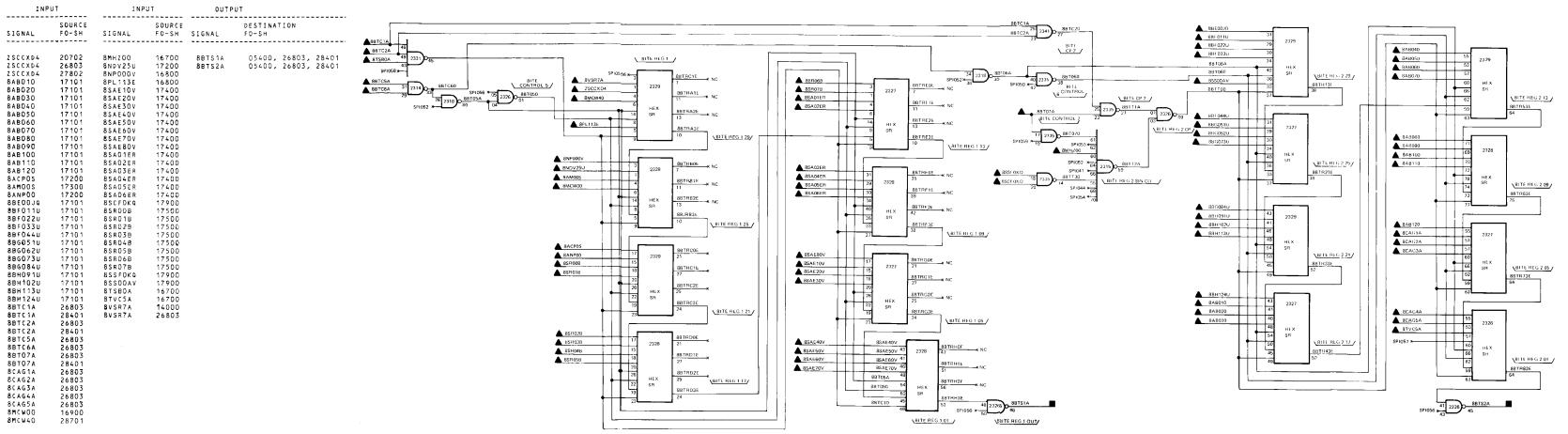
8SCFOKQ 8SLPOA 8SLPOOV 8SMO22T 8SPLOOV

8SSFOKQ 8SSFOKQ 8SSOOAV

FO-179. SDC Sine/Cosine Serial Output Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

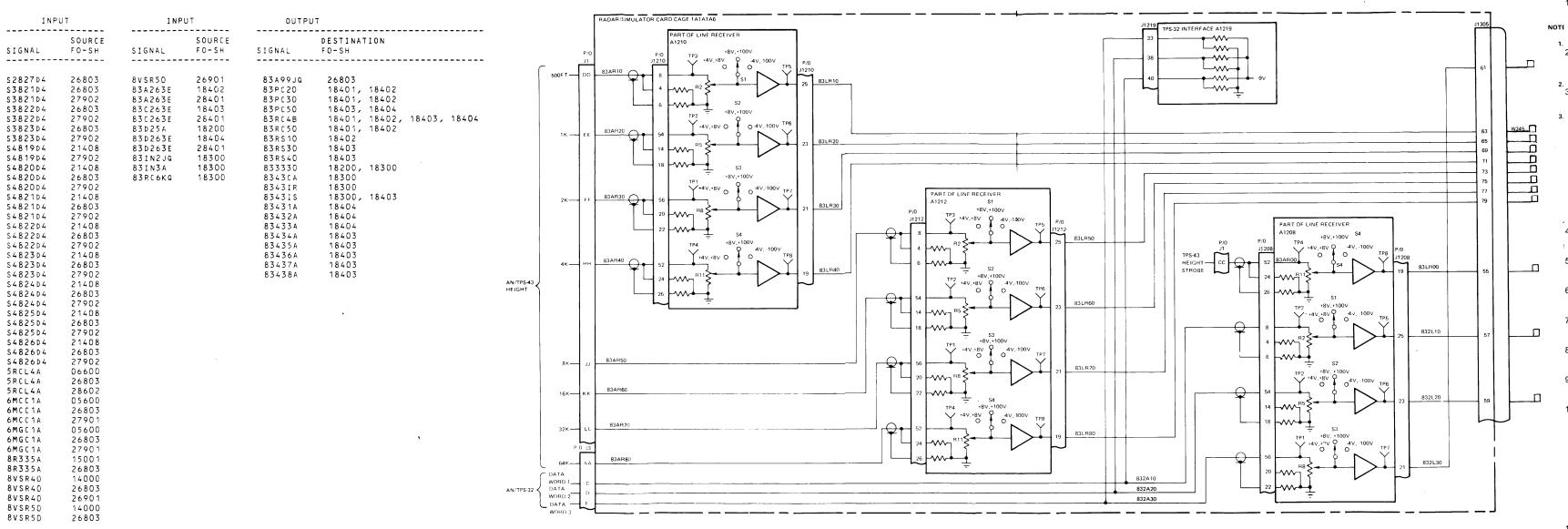
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
- INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP
 - REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
 - REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
 - REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - REFER TO TABLE 5-39 FOR CARD PART
 - REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



FO-180. SDC BITE Register Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
- ▲ INDICATES INPUT FROM ANOTHER FIGURE
- ackslash INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- ANOTHER FIGURE

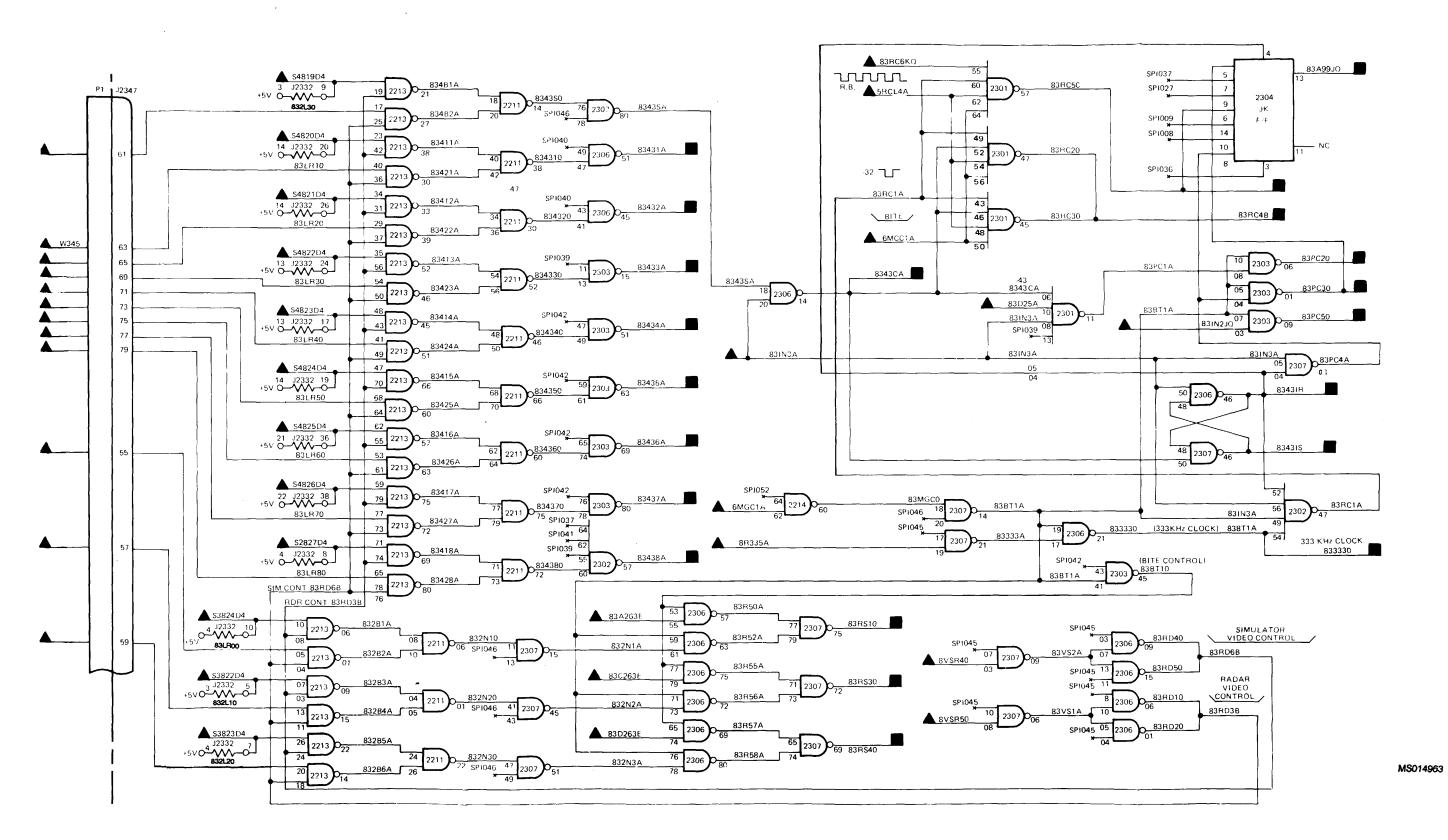
 REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 0. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



Change 2 FO-181. DIU Radar Simulator Data Selection and Control Logic Diagram (Sheet 1 of 2)

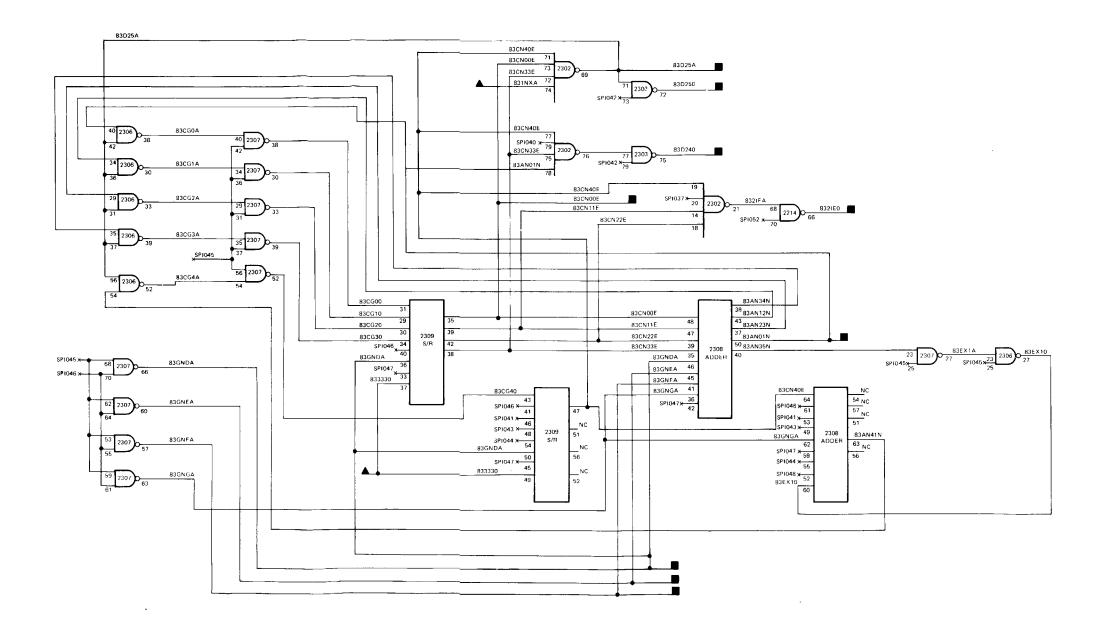
- 1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN:
 FOR COMPLETE DESIGNATIONS, PREFIX WITH
 APPLICABLE UNIT NUMBER AND ASSEMBLY
 DESIGNATION.
 - ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
- ▲ INDICATES INPUT FROM ANOTHER FIGURE
- \ INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- S. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
- A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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Change 2 FO-181. DIU Radar Simulator Data Selection and Control Logic Diagram (Sheet 2 of 2)

IN	PUT	OUTPL	UT	
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH	
83 I NX A 833330	18300 1810 2	83 A N O 1 N 83 C N O O E 83 D 2 4 O	18300 18300 18300	
		83D25A 83D25O 83GNDA 83GNEA 83GNFA 8321EO	18102, 18300 18300, 18401 18300, 18401, 18402 18300 18401 18300	



Change 2 FO-182. DIU Module-26 Counter Logic Diagram

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

▲ INDICATES INPUT FROM ANOTHER FIGURE

\(\) INDICATES INPUT FROM THE SAME FIGURE

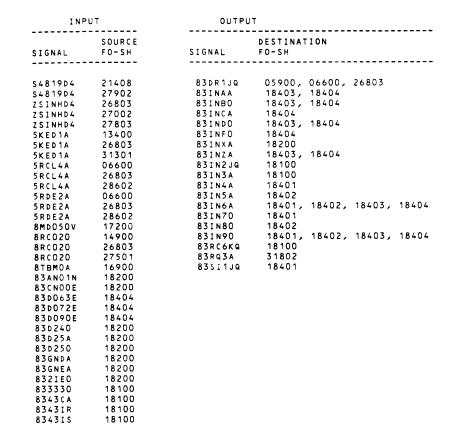
INDICATES OUTPUT TO ANOTHER FIGURE

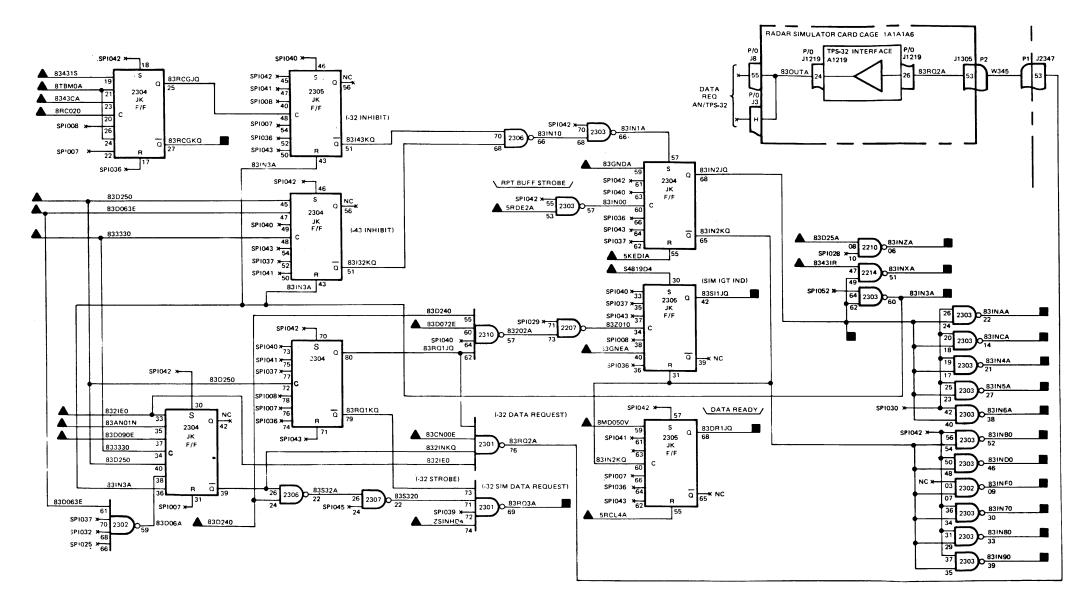
INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - 3. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE

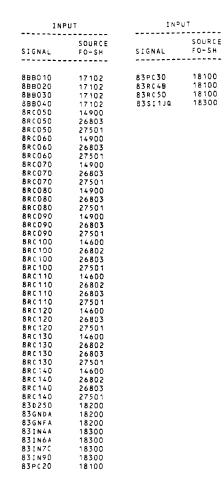
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- ANOTHER FIGURE
- DIAGRAM INDEX .

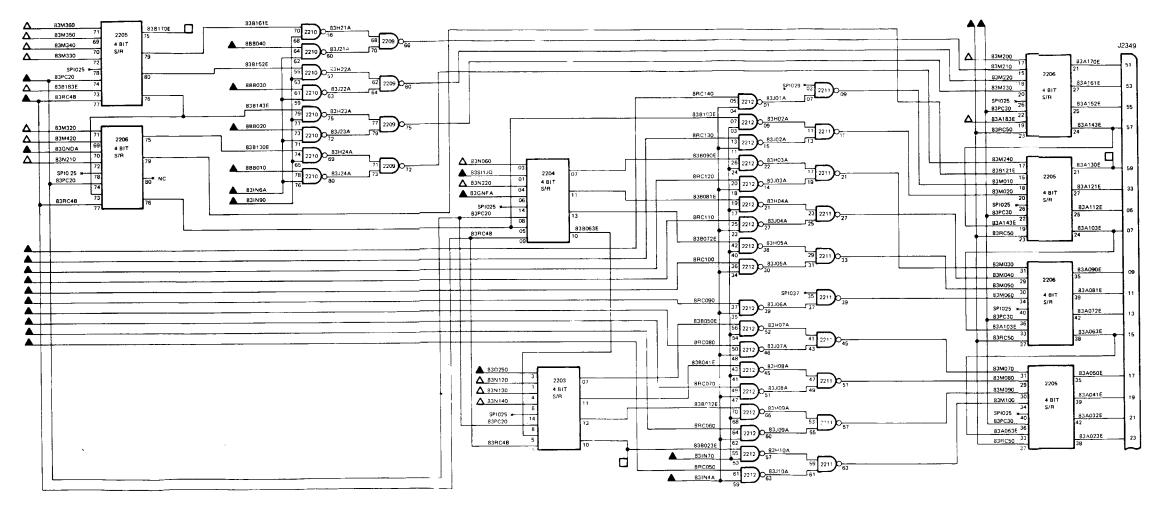
REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC

- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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Change 3 FO-183. DIU Data Receive Detector Logic Diagram





Change 3 FO-184. DIU Data Registers Logic Diagram (Sheet 1 of 4)

- N1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
 - △ INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
 - INDICATES OUTPUT TO THE SAME AND
- ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

M 9-1430-655-20-3-5

A 83N010 838250E A 83N020 55 A 83N030 53 A 83N030 57 SPI025 60 83PC20 66 83B263E 62 83RC4B 59 64 83B23E 64 83B23E 64 83B20E 61 83B20E 62 83B20E 63 83B20E 65 83B20E 65 83B20E 66 83B20E 66 83B192E 68 83B183E 64 64	88B120 37 39 08 2209 06 06 07 2210 83J13A 10 08 08 00 06 06 07 2210 08 83J13A 05 07 2210 09 06 01 01 01 01 01 01 01 01 01 01 01 01 01		Same Same
83N150 83B010E 83N160 17 83N170 15 83N180 18 87P1025 20 83PC030 83RC030 83B023E 22 83RC4B 19 83B303E 24 83B303E 24 83B303E 24 83B290E 21 83B290E 21 83B281E 83B272E 83B272E 83B303E 22 83B036 27 83B272E 83B303E 22	36 2210 33 83J17A 42 38 31 2210 33 83H18A 29 2310 33 34 2209 30 37 2210 39 83J18A 36 36 2210 52 54 2209 52 88BB060 50 2210 83J19A 56 88BB060 50 2210 83J19A 56 48 83B170E 48 83H20A	AZ LSB 83J001N 83JN6A 13 2209 15 10 2208 06 06 07 2209 09 09 09 09 09 09 09 09 09 09 09 09 0	83M110 83B001E 43 83B303E 41 83B303E 46 83B303E 46 83B303E 51 83A023E 50 83A023E 50 83A0250 49 83B281E 43 83B263E 48 83A272E 56 83A272E 56 83A263E MS200799B 83B263E 83B263E 83B263E 83B263E 83B263E 83B263E 83A010E 47 83A001E 51 83A312E 56 83A303E 55 83A202E 56 83A20E 47 83A281E 51 83A272E 56 83A263E 52 MS200799B

Change 3 FO-184. DIU Data Registers Logic Diagram (Sheet 2 of 4)

INPUT

SOURCE SIGNAL FO-SH

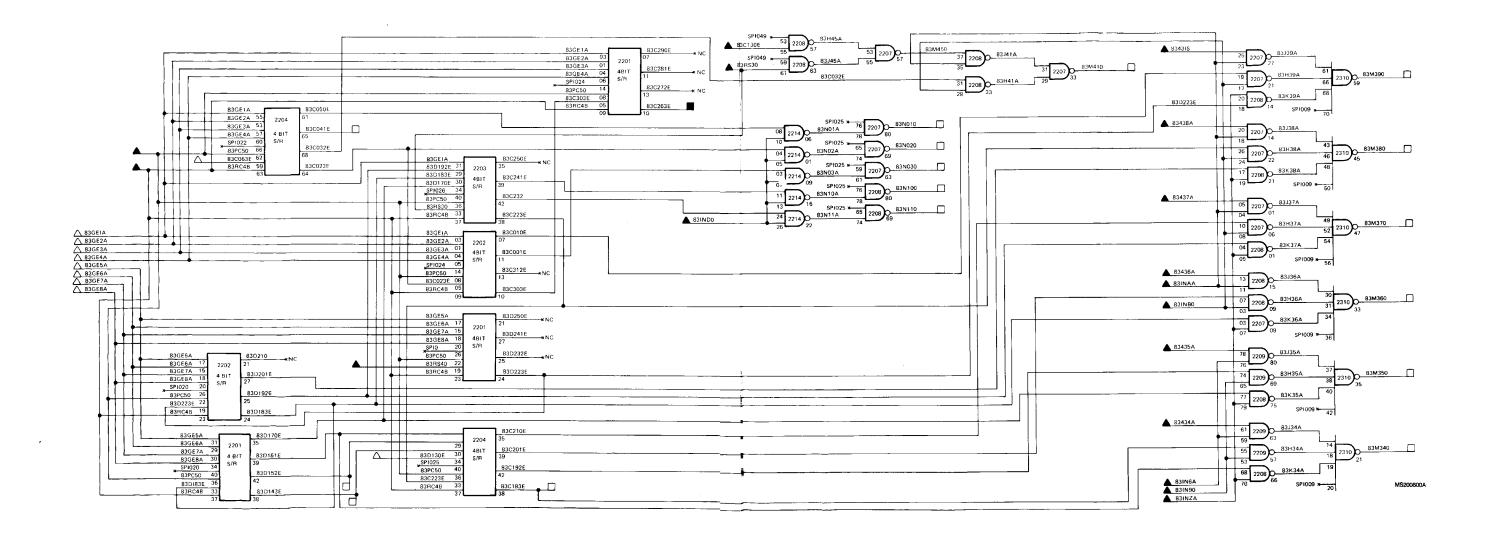
8BB050 8BB060 8BB070 8BB080 8BB090 8BB100 8BB110 8BBJ0030 8RC030 8RC030 8RC040 8RC0440 8RC040 8RC0

0UTPUT

83A263E 18100, 20502, 28401 83B263E 20502, 26803, 28401

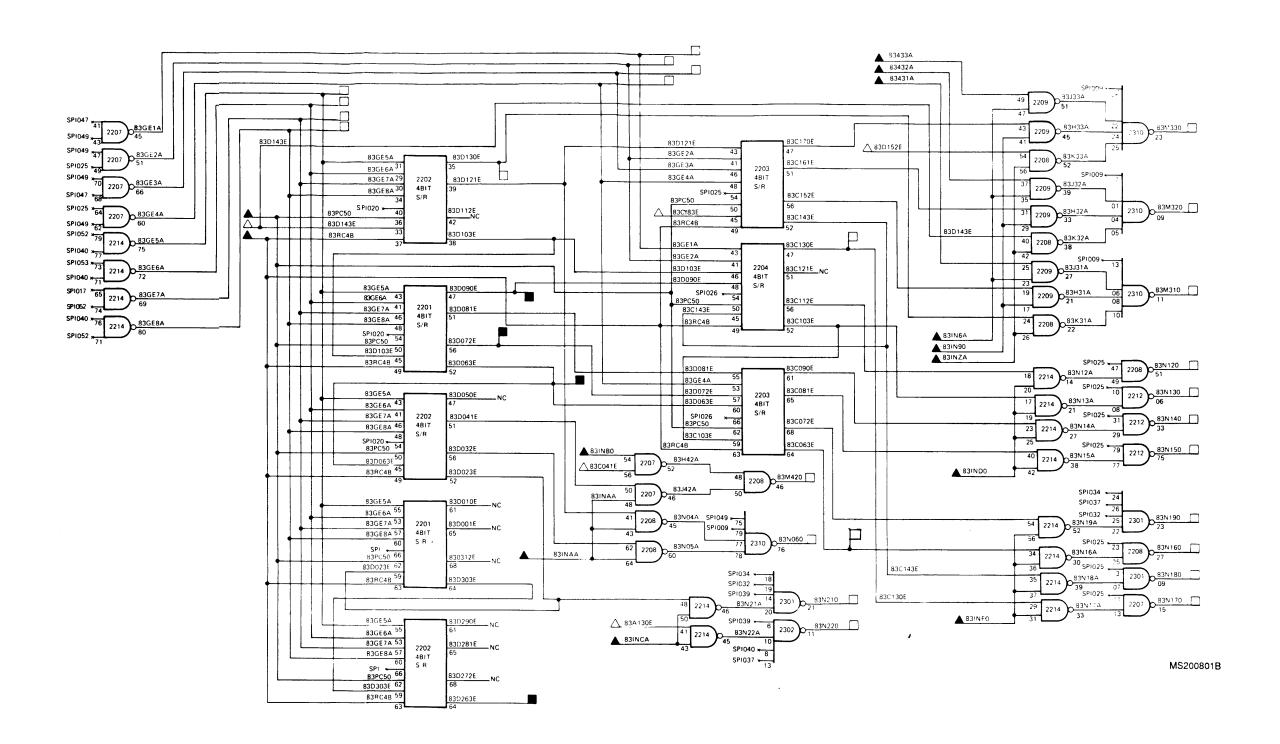
DESTINATION SIGNAL FO-SH

INF	דטי	OUTP	Tυ			-
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINA FO-SH	TION		
831NAA 831NBO 831NZA 831NZA 831N6A 831N9O 83PC5O 83RC4B 83RS3O 83RS3O 83431S 83434A 83435A 83436A 83437A 83437A	18300 18300 18300 18300 18300 18300 18102 18102 18102 18102 18102 18102 18102 18102 18102 18102	83C263E	18102,	20502,	26803,	28401

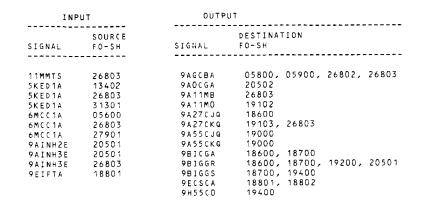


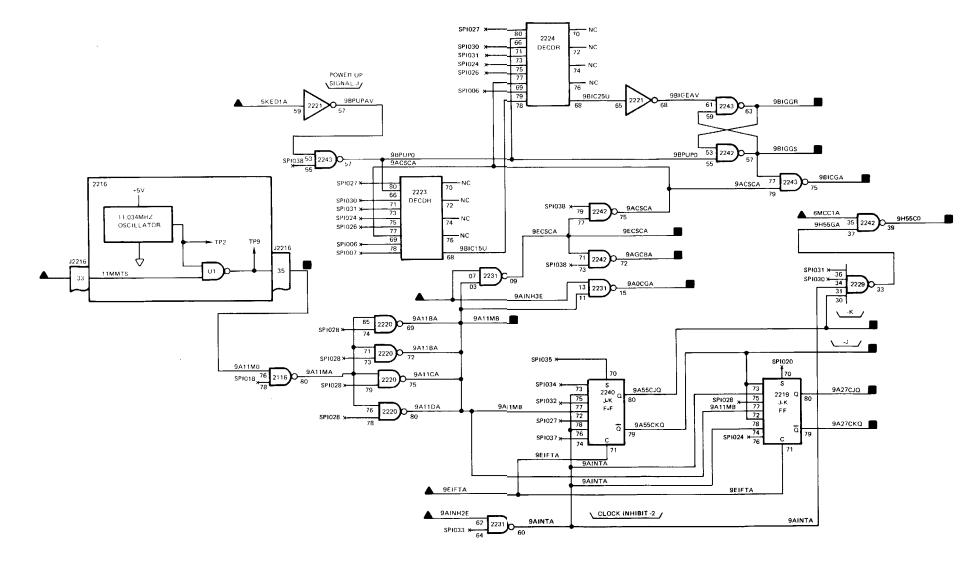
Change 3 FO-184. DIU Data Registers Logic Diagram (Sheet 3 of 4)

IN	PUT	0 U T P	U T
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
83 I NA A 83 I NB O 83 I NC A 83 I NC O 83 I NF O 84 I NF O 85 I N	18300 18300 18300 18300 18300 18300 18300 18300 18100 18100 18100	83D063E 83D072E 83D090E 83D263E	18300 18300



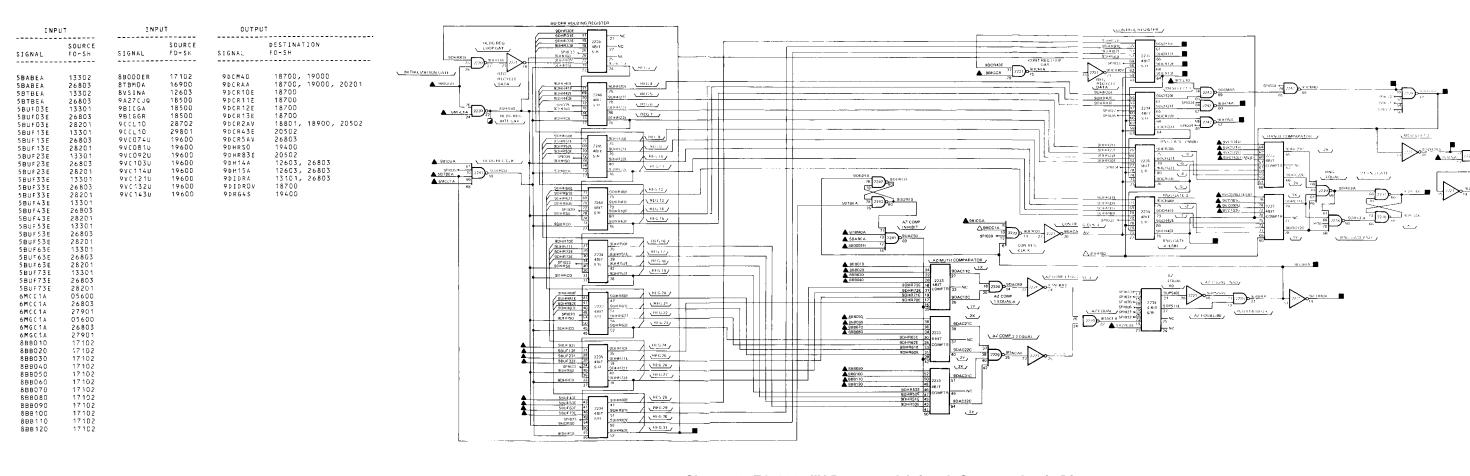
Change 3 FO-184. DIU Data Registers Logic Diagram (Sheet 4 of 4)





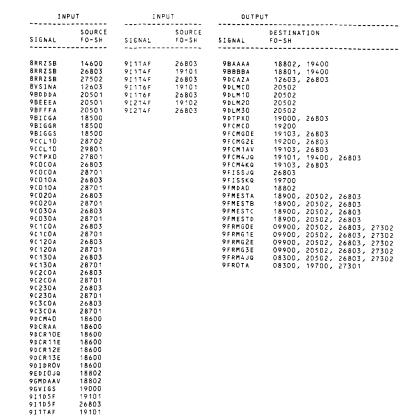
Change 2 FO-185. IIU Clock and Initialization Logic Diagram

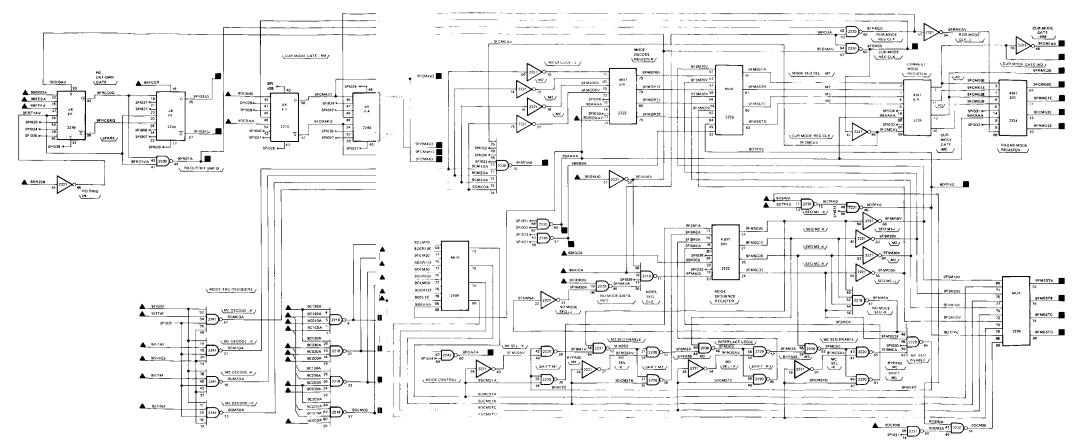
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 0. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



Change 2 FO-186. IIU Range and Azimuth Compare Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
- ▲ INDICATES INPUT FROM ANOTHER FIGURE
- △ INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- _
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



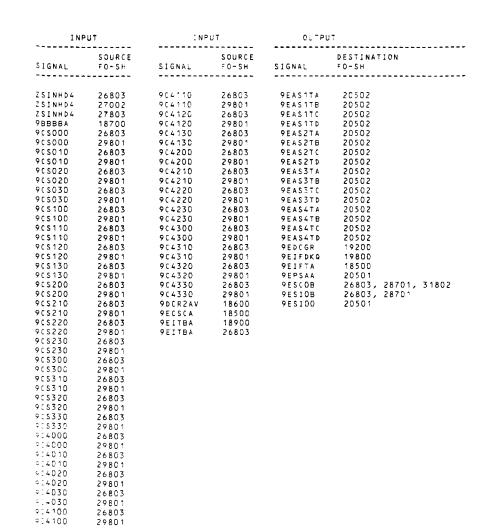


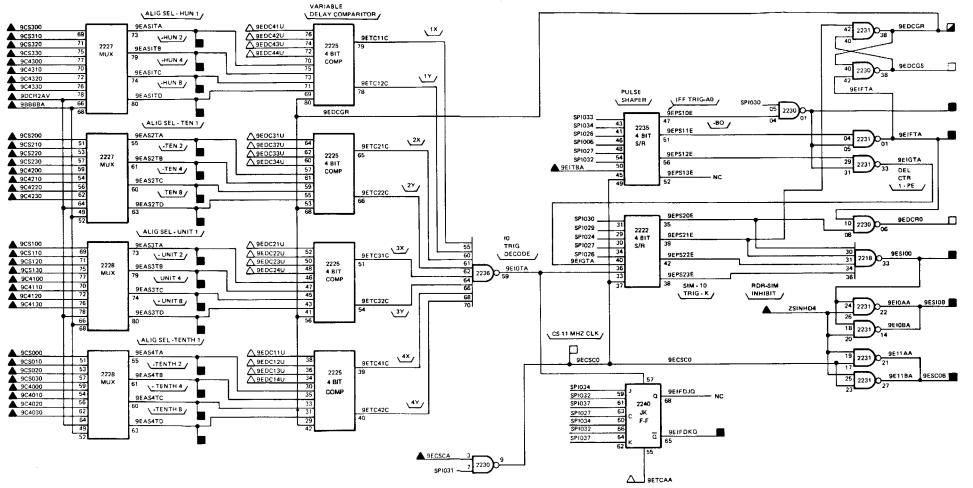
Change 3 FO-187. IIU Mode Sequencer and Gating Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE

 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

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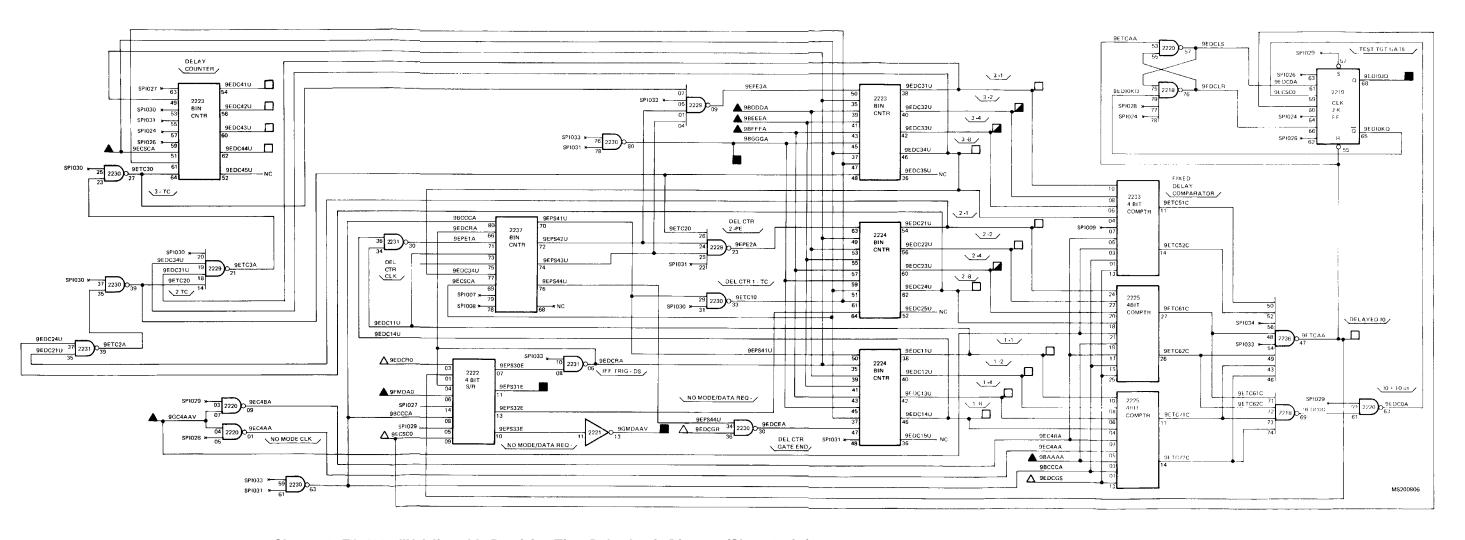


Change 3 FO-188. IIU Adjustable Precision Time Delay Logic Diagram (Sheet 1 of 2)

- . PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

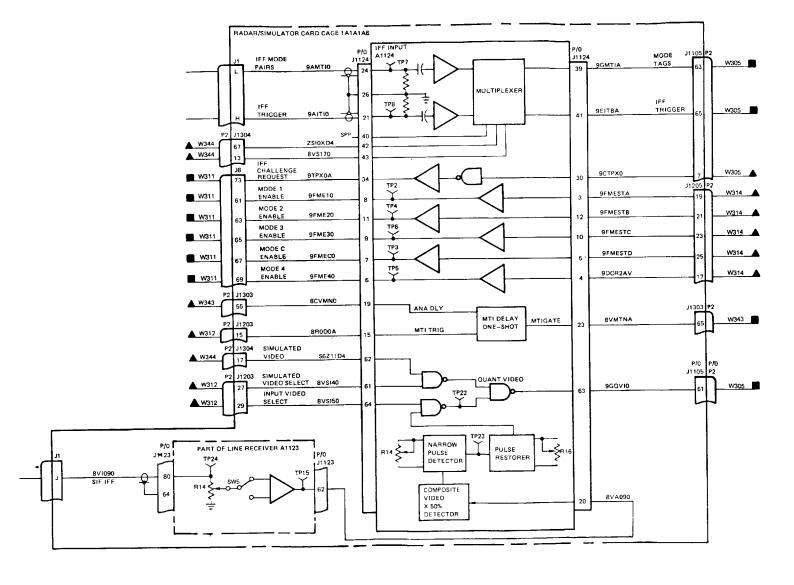
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INP	UT	OUTPL) 1			
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	ION		
					·	
9BAAAA	18700	9 B G G G A	19000,	19400		
9BDDDA	20501	9 E D C 2 3 U	19200			
9BEEEA	20501	9EDC32U	19200			
9BFFFA	20501	9EDC33U	19200			
9 E C S C A	18500	9EDIOJQ	18700,	19901		
9 FMDAD	18700	9EP\$31E	19600,	19901,	19903,	20201
95 C 4 A A V	19000	9 G M D A A V	18700,	19000		



Change 3 FO-188. IIU Adjustable Precision Time Delay Logic Diagram (Sheet 2 of 2)

INP	υT	OUTP	UT			
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINA'	TION		
	28801 20802 28802 28902 26901 14000 26901 14000 26901 14000 28801 27801 18600 18700 18700 18700	8VMTNA 9EITBA 9FMECO 9FME10 9FME30 9FME40 9GMT1A 9GQVIO 9TPXOA	33100 33100 33100 33100 33100 19000,		20502,	26803



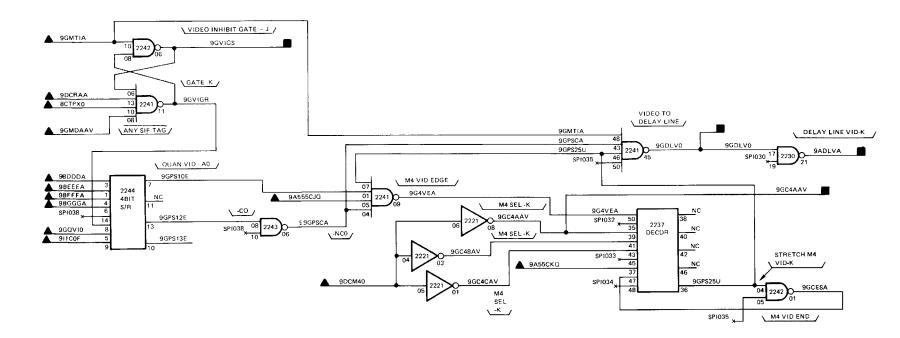
NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6)
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 4. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 5. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 6. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

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Change 3 FO-189. IIU IFF Interface Circuit Logic Diagram

INP	INPUT OUTPUT		INPUT OUTPUT		UT
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH		
9 A 5 5 C J Q	18500	9 A D L V A	20501		
9 A 5 5 C K Q	18500	9 G C 4 A A V	18802		
9BDDDA	20501	9GDLV0	19101, 20502, 26803		
9BEEEA	20501	9 G V I G S	18700		
9BFFFA	20501				
9BGGGA	18802				
9 D C M 4 O	18600				
9 D C R A A	18600				
9DTPX0	18700				
9 G M D A A V	18802				
9GMTIA	18900				
9GQVID	18900				
9 I 1 C D F	19101				
9 I 1 C D F	26803				



FO-190. IIU Video Quantizer Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:

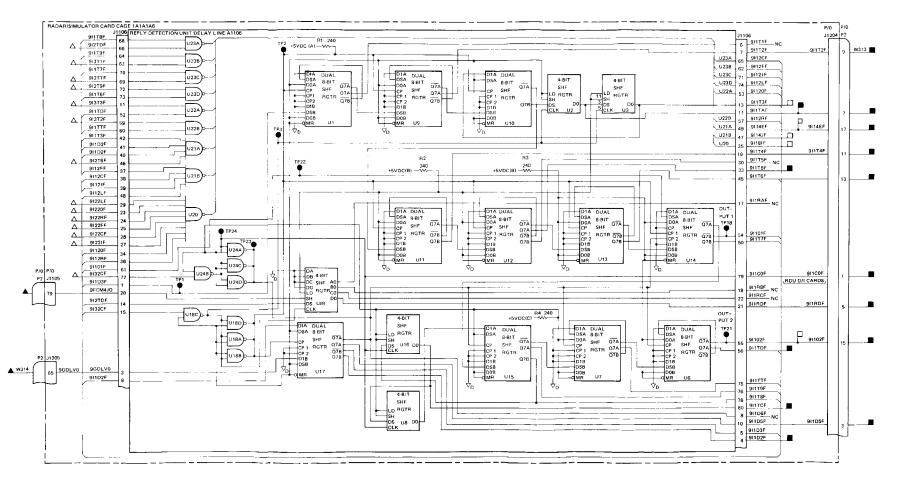
DIAGRAM INDEX .

- ▲ INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

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1/0 TABLES FOR F0-19101

INP	UΤ	0UTP	UT
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
9FCM4JQ	18700	911COF	19000, 19400, 19800
9GDLVO	19000	911D2F	19300
		9 I 1 D 5 F	18700
		9 I 1 R D F	19400, 26803
		9 I 1 T A F	18700, 19300
		911TBF	19300
		9 I 1 T C F	19300
		9 I 1 T D F	19300
		911T2F	19200, 26803
		9 I 1 T 4 F	18700
		9 I 1 T 6 F	18700
		9 I 10 2 F	26803
		9114EF	



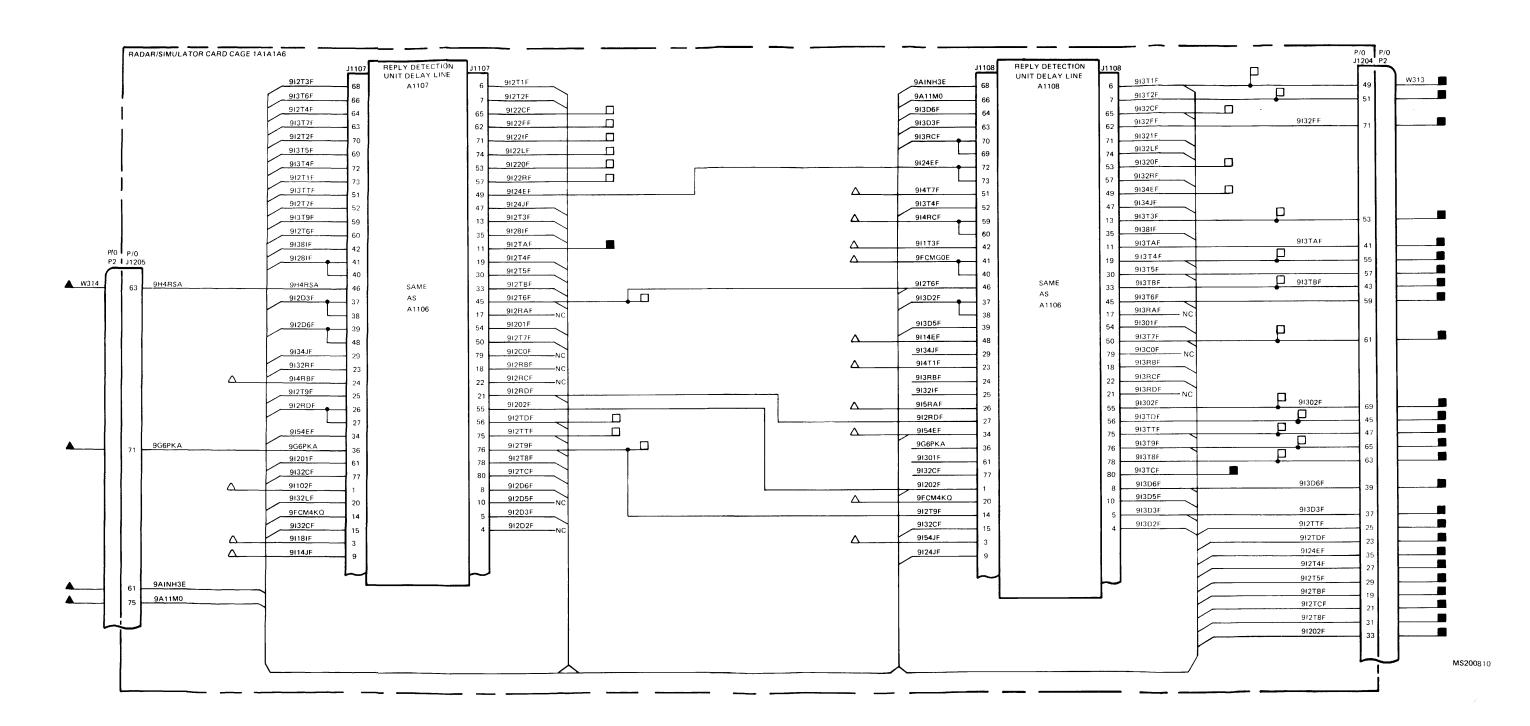
NOTES: UNLESS OTHERWISE SPECIFIED

- I. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6)
- 8. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 4. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 5. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 6. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

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FO-191. IIU Delay Lines Logic Diagram (Sheet 1 of 3)

INPUT		OUTPI	JT		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	ION	
9 A I N H 3 E 9 A I N H 3 E 9 A 1 1 M O 9 G 6 P K A 9 G 6 P K A 9 H 4 R S A 9 H 4 R S A	20501 26803 18500 19200 26803 19400	912TAF 912TBF 912TCF 912TDF 912TTF 912T4F 912T5F	19300 19400, 19400, 19200, 19200, 18700	19400, 19400, 26803	
		91202F 9124EF 913D3F 913D6F 913TAF 913TBF	19200, 19400, 19400,	20501, 26803 26803 26803	26803
		913TDF 913TTF 913T1F 913T2F 913T3F	19200,	19400, 19400, 19400,	26803 26803 26803 26803
		913T5F 913T6F 913T7F 913T8F 913T9F 91302F	19400, 19200, 19200, 19200,	26803 19400, 19400, 19400,	26803 26803 26803 26803



FO-191. IIU Delay Lines Logic Diagram (Sheet 2 of 3).

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Change 3 FO-191. IIU Delay Lines Logic Diagram (Sheet 3 of 3).

OUTPUT

DESTINATION SIGNAL FO-SH

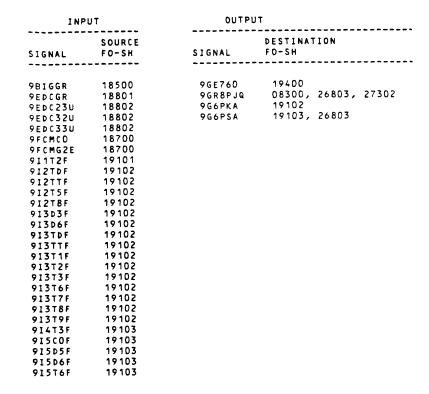
914TAF 914TBF

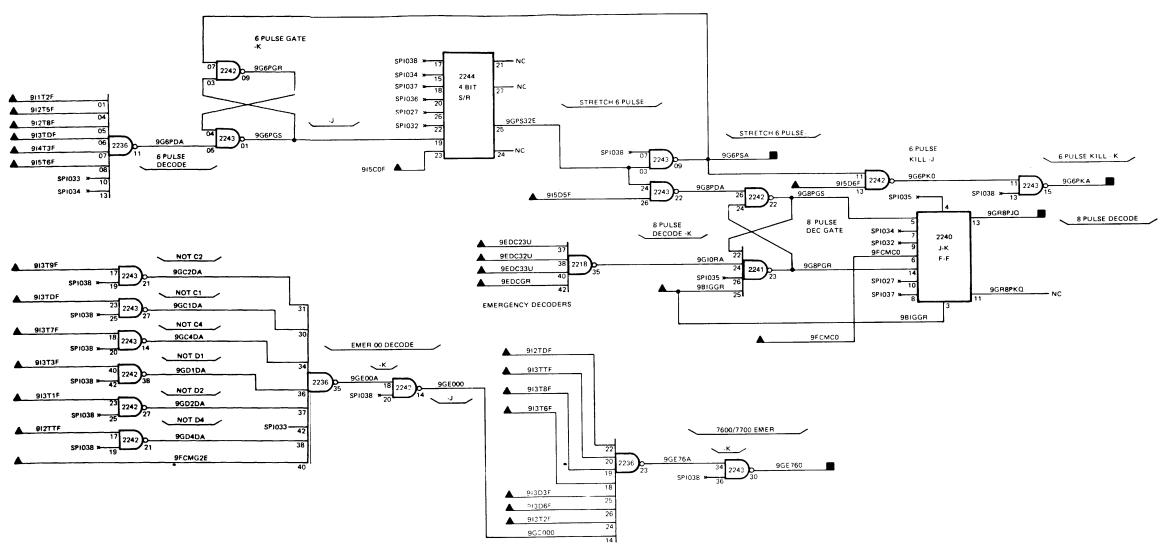
914TBF 914TCF 914TDF 914T3F 91402F 9144EF 915COF 915D5F 915D6F 915T6F 915O1F

INPUT

SIGNAL FO-SH

9:27CKQ 9FCMGOE 9FCM1AV 9FCM4KQ 9G6PSA SOURCE





Change 3 FO-192. IIU Emergency Decoders Logic Diagram.

- . PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

DIAGRAM INDEX .

REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.

REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC

 REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

 CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

0. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

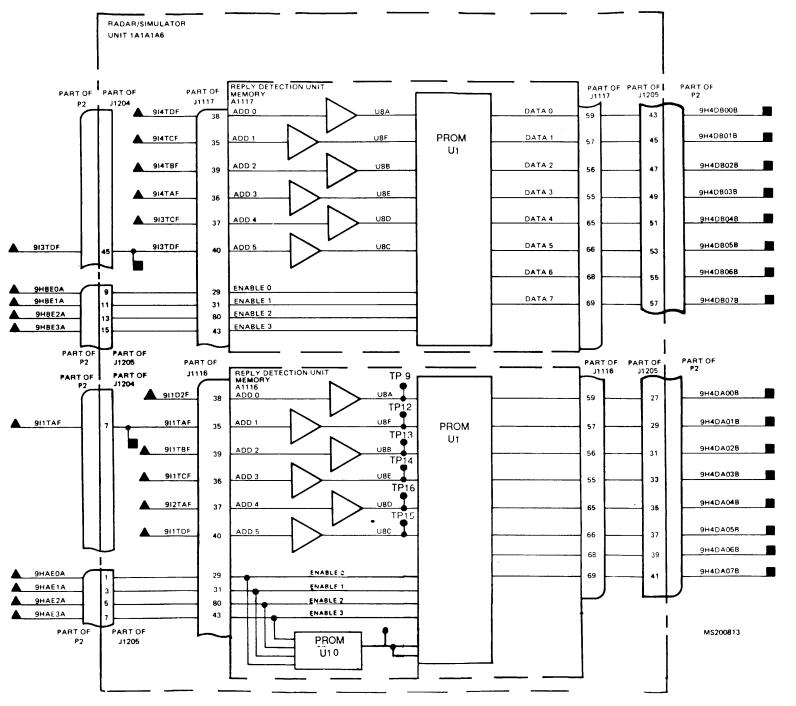
B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

 SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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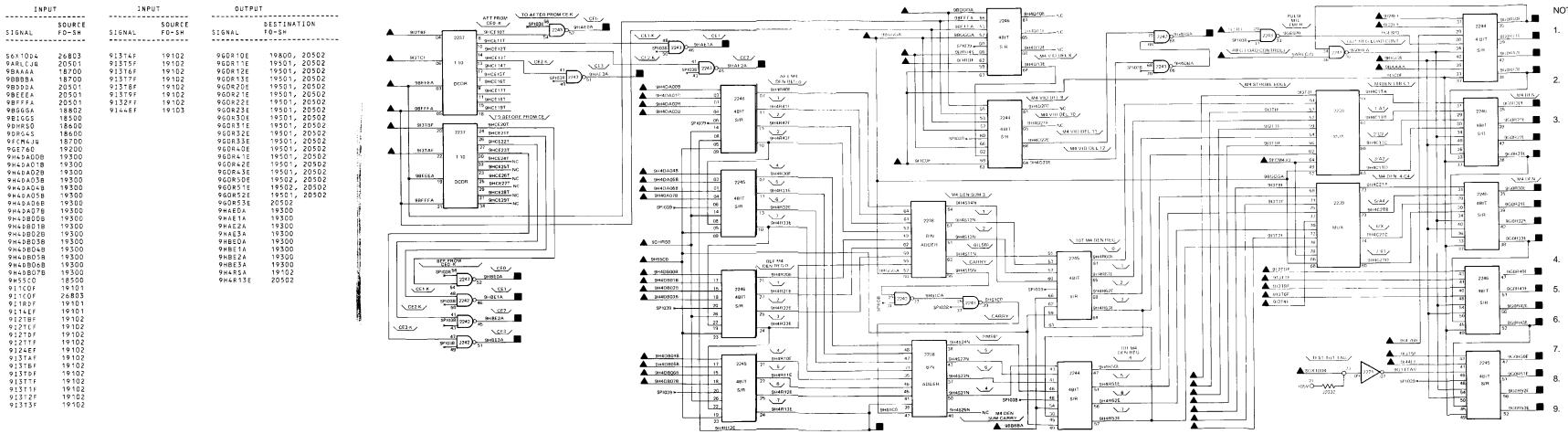
INF	PUT	OUTPU	T	
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT: FO-SH	ION
0	40/00	00// 04/00/0	40/00	2/807
9 H A E O A		9H4DAOOB 9H4DAO1B		
9HAEOA	26803	94404018	19400,	20003
9 H A E 1 A	19400	9H4DA02B	19400,	20003
YHAEIA	20003	9H4DA03B	19400,	20003
	19400	9H4DA04B		
	•		19400, 19400,	= '
	26803	9H4DAO6B 9H4DAO7B	19400,	
9 H A E 3 A	19400	9H4DB00B	19400,	
9HBEOA	19400		19400,	
	26803 19400		19400,	
		9H4DB02B	•	
		9H4DB03B	,	
		9H4DB04B		
9HBE3A	19400	9H4DB06B	19400	26803
9HBE3A	26803	9H4DB07B	19400	26803
	19101	711495015	.,,,,,,,	
	19101			
	26803			
	19101			
	19101			
9 I 1 T D F	19101			
912TAF	19102			
	19102			
914TAF	19103			
914TBF	19103			
914TCF	19103			
914TDF	19103			



- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6.)
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- S. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 7. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS

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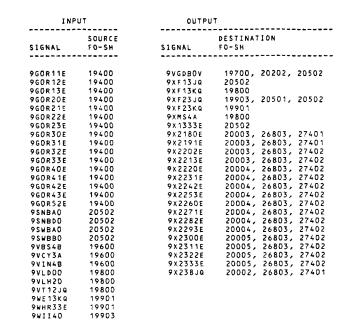
Change 3 FO-193. IIU Before and After Density PROM Logic Diagram.

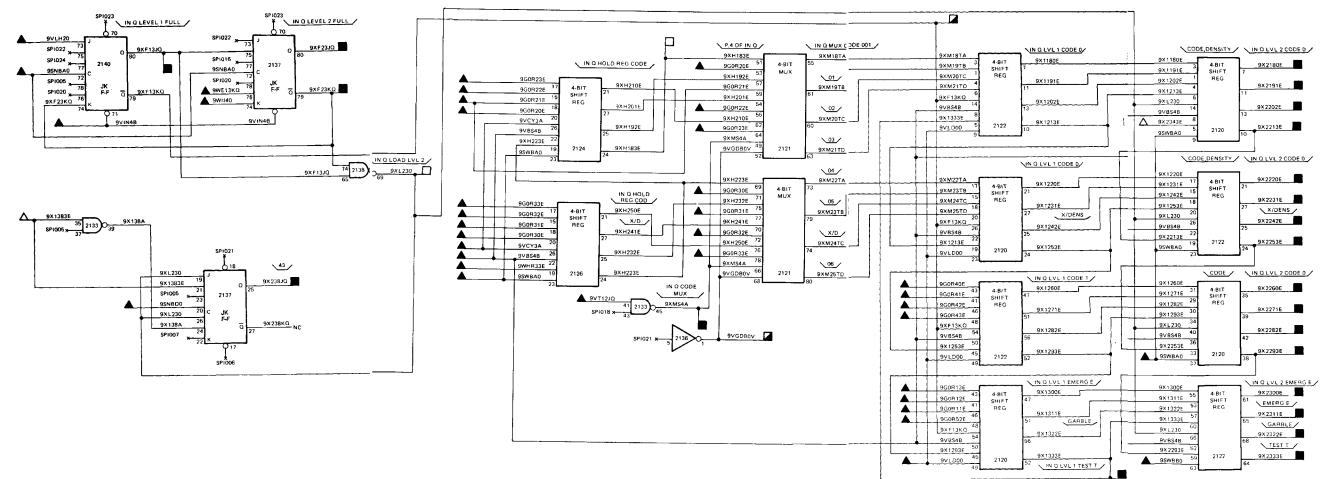


FO-194. IIU Mode 4 Density Logic and Test Gate Generator Logic Diagram.

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- . REFERENCES ARE AS FOLLOWS:
- INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- . REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

MS200814





Change 3 FO-195. IIU IFF Input Queue Logic Diagram (Sheet 1 of 2).

- I. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- B. REFERENCES ARE AS FOLLOWS:

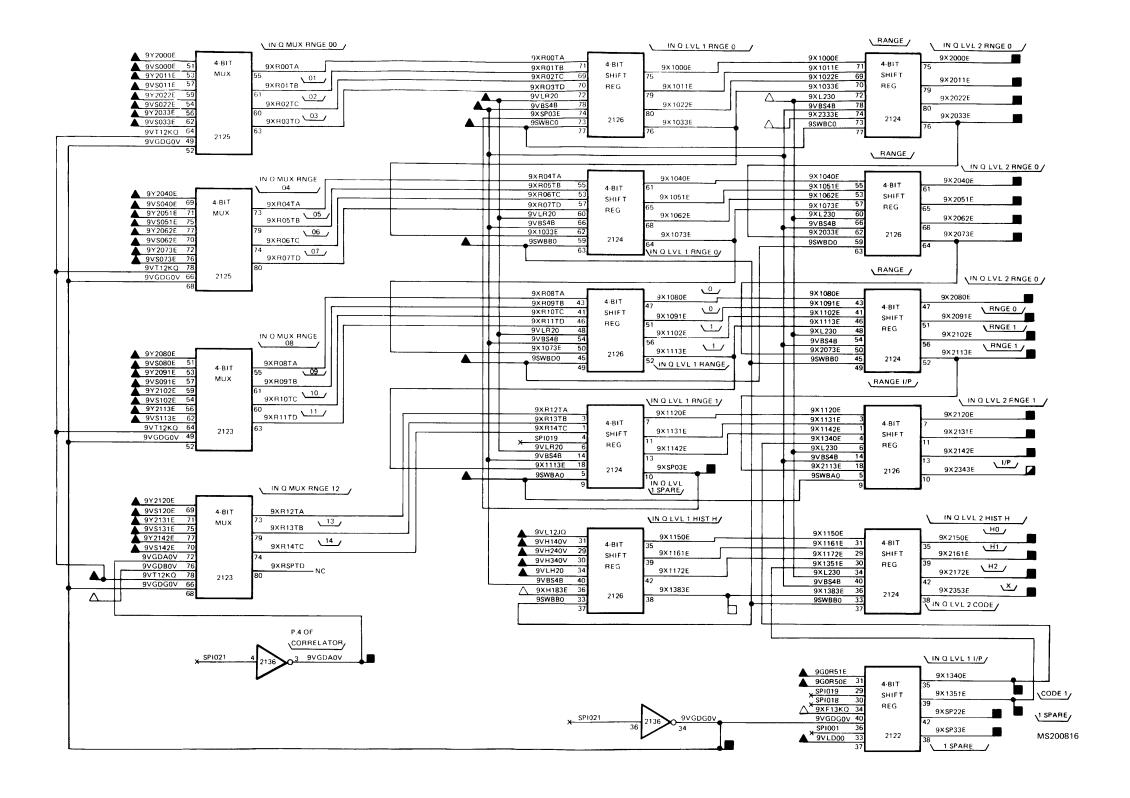
ANOTHER FIGURE

- INDICATES INPUT FROM ANOTHER FIGURE
- \ INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227

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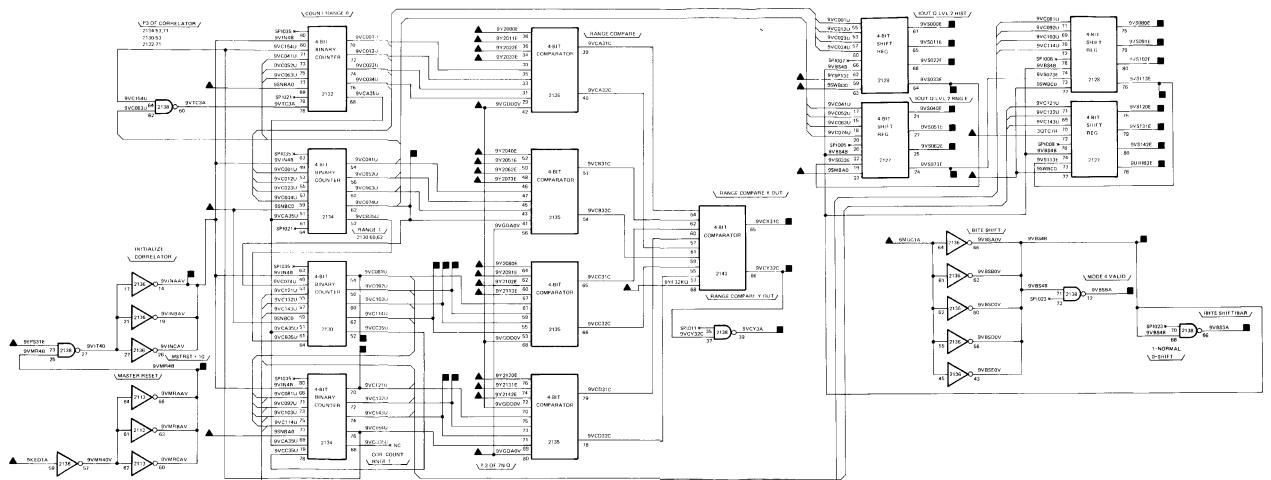
INP	דע	OUTP	UΤ			
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	ION		
9GOR50E 9GOR51E 9SWBAO 9SWBBO 9SWBCO 9SWBDO 9VBS4B	19400 19400 20502 20502 20502 20502 19600	9 V G D A O V 9 V G D G O V 9 X S P O 3 E 9 X S P 2 2 E 9 X S P 3 3 E 9 X 1 3 4 0 E 9 X 1 3 5 1 E	19600, 19901, 20502 20502 20502 20502		19902,	20202
9VH140V 9VH240V 9VH340V 9VLD00 9VLH20 9VLR20 9VL12JQ 9VS000E 9VS011E 9VS022E 9VS033E 9VS040E	19800 19800 19800 19800 19800 19800 19800 19600 19600 19600	9x2000E 9x2011E 9x2022E 9x2033E 9x2040E 9x2051E 9x2062E 9x2073E 9x2080E 9x2091E 9x2102E 9x2113E	20001, 20001, 20001, 20001, 20001, 20001, 20001, 20002, 20002, 20002,	26803, 26803, 26803, 26803, 26803, 26803, 26803, 26803, 26803,	27401 27401 27401 27401 27401 27401 27401 27401 27401 27401 27401	
9 V S O 5 1 E 9 V S O 6 2 E 9 V S O 7 3 E 9 V S O 8 O E 9 V S O 9 1 E 9 V S 1 O 2 E 9 V S 1 1 3 E 9 V S 1 2 O E 9 V S 1 3 1 E 9 V S 1 4 2 E	19600 19600 19600 19600 19600 19600 19600 19600	9 X 2 1 2 0 E 9 X 2 1 3 1 E 9 X 2 1 4 2 E 9 X 2 1 5 0 E 9 X 2 1 6 1 E 9 X 2 1 7 2 E 9 X 2 3 4 3 E 9 X 2 3 5 3 E	•	26803, 26803, 26803, 26803, 26803, 20502,	27401 27401 27401 27401	
9 Y T 12 KQ 9 Y 2 0 0 0 E 9 Y 2 0 1 1 E 9 Y 2 0 2 2 E 9 Y 2 0 3 3 E 9 Y 2 0 4 0 E 9 Y 2 0 5 1 E 9 Y 2 0 6 2 E 9 Y 2 0 7 3 E 9 Y 2 0 8 0 E 9 Y 2 0 9 1 E 9 Y 2 1 1 3 E 9 Y 2 1 1 3 E 9 Y 2 1 1 3 E 9 Y 2 1 1 4 2 E	19800 20100 20100 20100 20100 20100 20100 20100 20100 20100 20100 20100 20100 20100 20100					

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FO-195. IIU IFF Input Queue Logic Diagram (Sheet 2 of 2)

INF	νυτ	0UTP	ΤL			
SIGNAL	S O U R C E F O - S H	SIGNAL	DESTINAT FO-SH	ION		
_						
3QTC7R		9UIHB3E				
3QTC7R		9 V B S B A				
3QTC7R	27302	9 V B S 3 A	19901			
5KED1A 5KED1A	13400	9 V B S 4 B	19501,	19502,	19800,	19901,
5KED1A	26803		20100.	20300		
5KED1A		9 V C X 3 1 C		20100		
6MGC1A	05600	9 V C Y 3 A	19501			
6MGC1A 6MGC1A	26803	9 V C Y 3 2 C	19800, 18600,	20100		
6 M G C 1 A	27901	9 V C O 7 4 U	18600,	19600		
9EPS31E		9 V C O 8 1 U	18600			
9SNBAO	20502	9 V C O 9 2 U				
9SNBCO 9SWBAO 9SWBCO	20502	9 V C 103 U	18600			
9SWBA0	20502	9 V C 1 1 4 U 9 V C 1 2 1 U	18600			
95WBC0	20502	9 V C 12 1u	18600			
9SWBD0		9 V C 13 2 U	18600			
9 V C D 7 4 U	19600	9 V C 1 4 3 U	18600			
9 V G D A D V 9 V G D D O V	19502	9 V C 1 4 3 U 9 V I N 4 B 9 V M R 4 B	19501,	19800,	20100	
		9 V M R 4 B	19700,	19901,	19903,	20201,
9 Y F 3 2 K Q	20100		20202			
9 Y S P 13 E	20100	9 V S O O O E	19502			
9YSP13E 9Y2000E 9Y2011E	20100	9 V S O 1 1 E 9 V S O 2 2 E	19502			
9 Y 2 O 1 1 E	20100	9 V S C 2 2 E	19502			
9Y2022E		9 V S C 3 3 E				
9 Y 2 O 3 3 E	20100	9 V S O 4 O E	19502			
9 Y 2 O 4 O E 9 Y 2 O 5 1 E	20100	9 V S O 5 1 E 9 V S O 6 2 E	19502			
	20100	9VS062E	19502			
9 Y 2 O 6 2 E	20100	9 V S O 7 3 E	19502			
9 Y 2 O 7 3 E	20100	9 V S O 8 O E	19502			
9 Y 2 O 8 O E 9 Y 2 O 9 1 E	20100	9 V S O 9 1 E 9 V S 1 O 2 E	19502			
9 Y 2 O 9 1 E	20100	9 V S 1 D 2 E	19502			
9 Y 2 1 0 2 E		9 V S 1 13 E	19502			
9 Y 2 1 1 3 E	20100	9 V S 1 2 O E	19502			
9 Y 2 1 2 0 E 9 Y 2 1 3 1 E	20100	9 V S 13 1 E	19502			
9 Y 2 1 3 1 E	20100	9 V S 1 4 2 E	19502			
9 Y 2 1 4 2 E	20100					



- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
 - ↑ INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- PERFORM THE FOLLOWING:

 A. FROM CIRCUIT SYMBOL NOTE CARD
- LOCATION AND CIRCUIT CARD PIN NUMBER

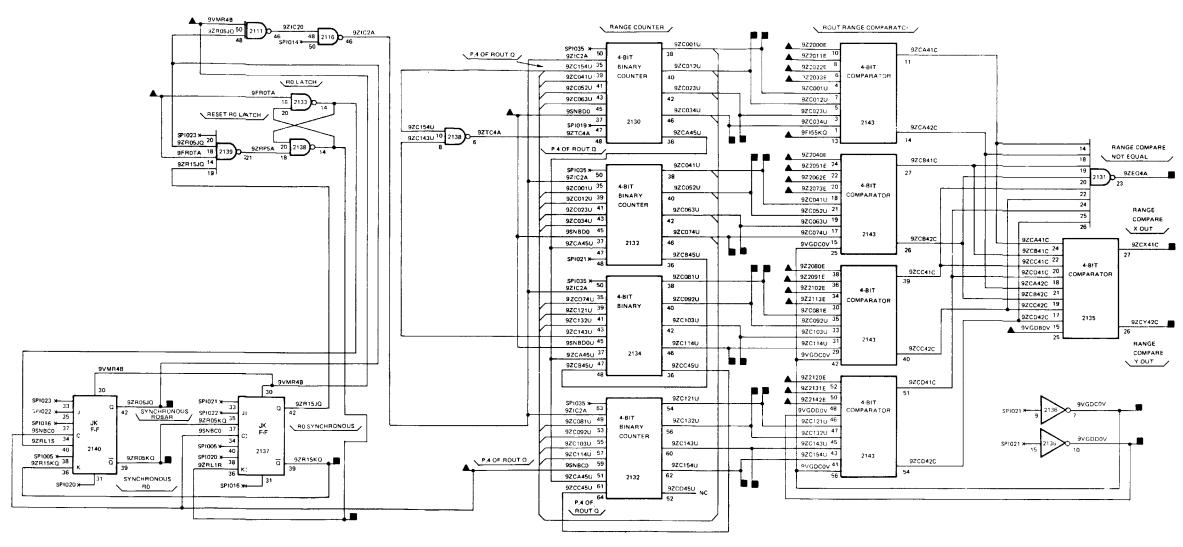
TO DETERMINE CIRCUIT CARD PIN/TEST POINT

- B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217, AND A2332

INPU	JT	0 U T P U	ОИТРИТ		
	SOURCE FO-SH	SIGNAL	DESTINAT	TION	
ROTA NBCO NBDO 100BOV 1	18700 26802 27301 20502 20502 19501 19600 20300 20300 20300 20300 20300 20300 20300 20300 20300 20300 20300 20300 20300 20300	9 V G D C O V 9 V G D D O V 9 2 C X 4 1 C 9 Z C Y 4 2 C 9 Z C O O 1 U 9 Z C O O 2 U 9 Z C O O 2 U 9 Z C O O S U 9 Z R O S S Q 9 Z R O S S S Q 9 Z R O S S S S S S S S S S S S S S S S S S	19600 20300 20300 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502 20502	19903,	

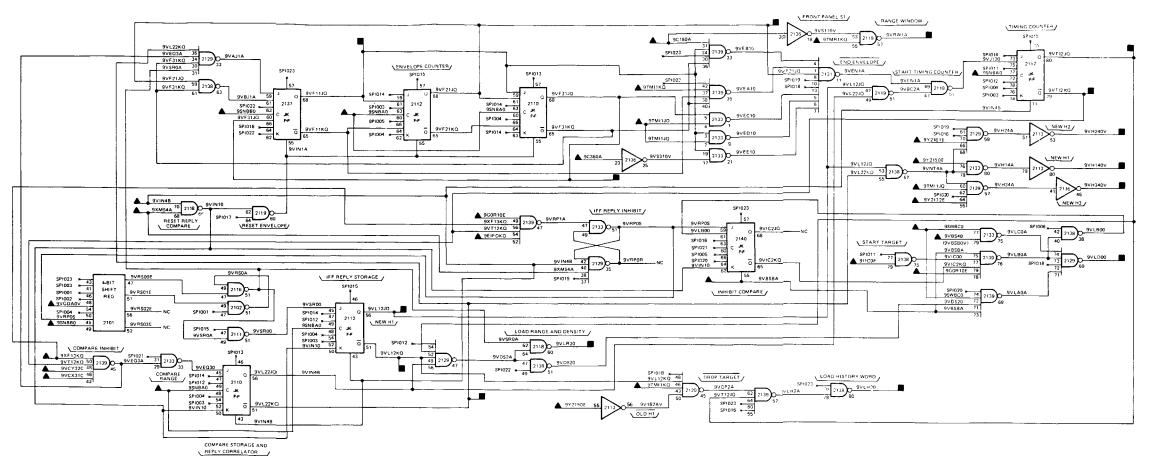
AUTOUT

TAIDILT



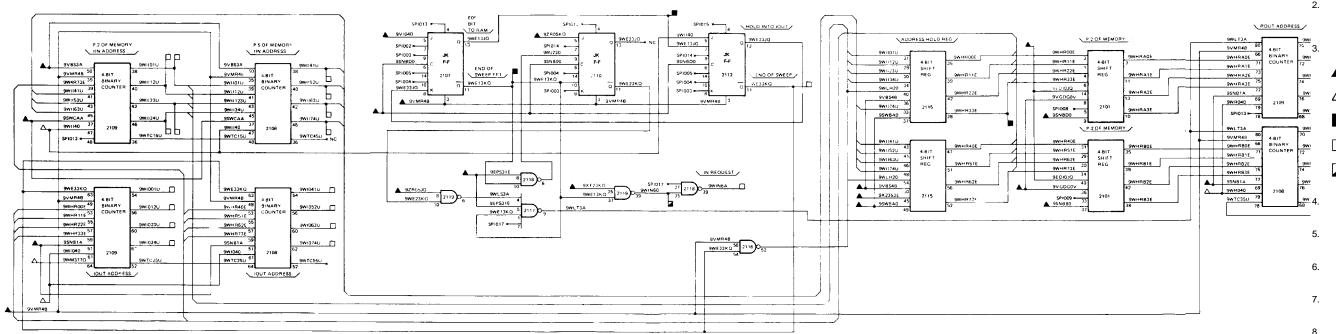
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2227 AND A2332

INPUT		OUTP	UT.
SIGNAL	SOURCE	SIGNAL	DESTINATION
		5101472	
9 C 1 8 D A	29801	9 V F 1 1 J Q	20502
9C360A	29801	9 V F 2 1 J Q	20502
9EIFDK2	18801	9 V F 3 1 J Q	20502
9G0R10E	19400	9VH140V	19502
911COF		9VH240V	
9 I 1 C O F	26803	9VH340V	19502
95NBAO	20502	9VLD00	
PSNBBO		9VLH20	
SWBCO	20502	9VLR20	
9TMI1JQ		9VL 12 JQ	
PTMI1KQ		9 V L 12 K Q	
9TMR1KQ		9VL22KQ	
9VBSBA	19600		12300, 26803, 27301
9VBS4B		9VT12JQ	
9VCX31C		9VT12KQ	
	19600		
9VGDAOV			
9 V I N 4 B			
9 X F 1 3 K Q			
XMS4A			
9 Y 2 1 5 0 E			
9 Y 2 1 6 1 E			
9Y2172E	20100		



- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - ▲ INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX
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- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

INP	TUT	OUTP	UT		
	SOURCE		DESTINA	TION	
SIGNAL	FO-SH	SIGNAL	F O - S H		
9EDIOJQ	18802	9WE13JQ	20005,	26803,	27402
9EPS31E	18802	9WE13KQ	19501		
9SNBB0	20502	9WHR33E	19501,	20502	
9SNBD0	20502	9WIN60	20502		
9SNB1A	20502				
9 S W B A O	20502				
9 S W C A A	20502				
9VBS3A	19600				
9 V B S 4 B	19600				
9 V G D G O V	19502				
9 V I O 4 O	20201				
9VMR4B	19600				
9XF23KQ	19501				
9 X 2 3 5 3 E	19502				
9 X 2 3 5 3 E	27402				
92R05JQ	19700				
9ZRO5KQ	19700				



- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)

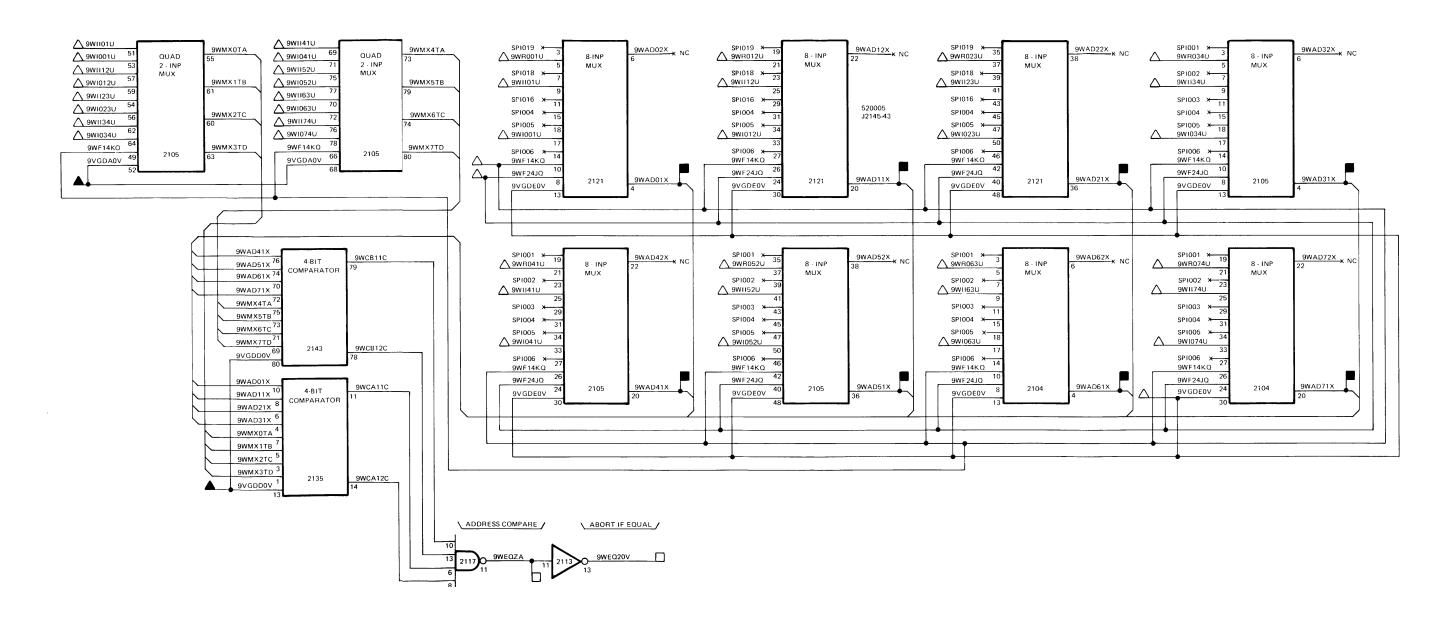
REFERENCES ARE AS FOLLOWS:

- INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES INPUT FROM THE SAME FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND

REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .

- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
- C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

INP	UT	0UTP1	JT		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT FO-SH	TION	
9 V G D A O V 9 V G D D O V 9 V G D E O V	19502 19700 20502	9 W A D O 1 X 9 W A D O 1 1 X 9 W A D 2 1 X 9 W A D 3 1 X 9 W A D 4 1 X 9 W A D 5 1 X 9 W A D 6 1 X 9 W A D 7 1 X	20005, 20005, 20005, 20005, 20005,	20502, 20502, 20502, 20502, 20502, 20502, 20502, 20502,	26803 26803 26803 26803 26803 26803

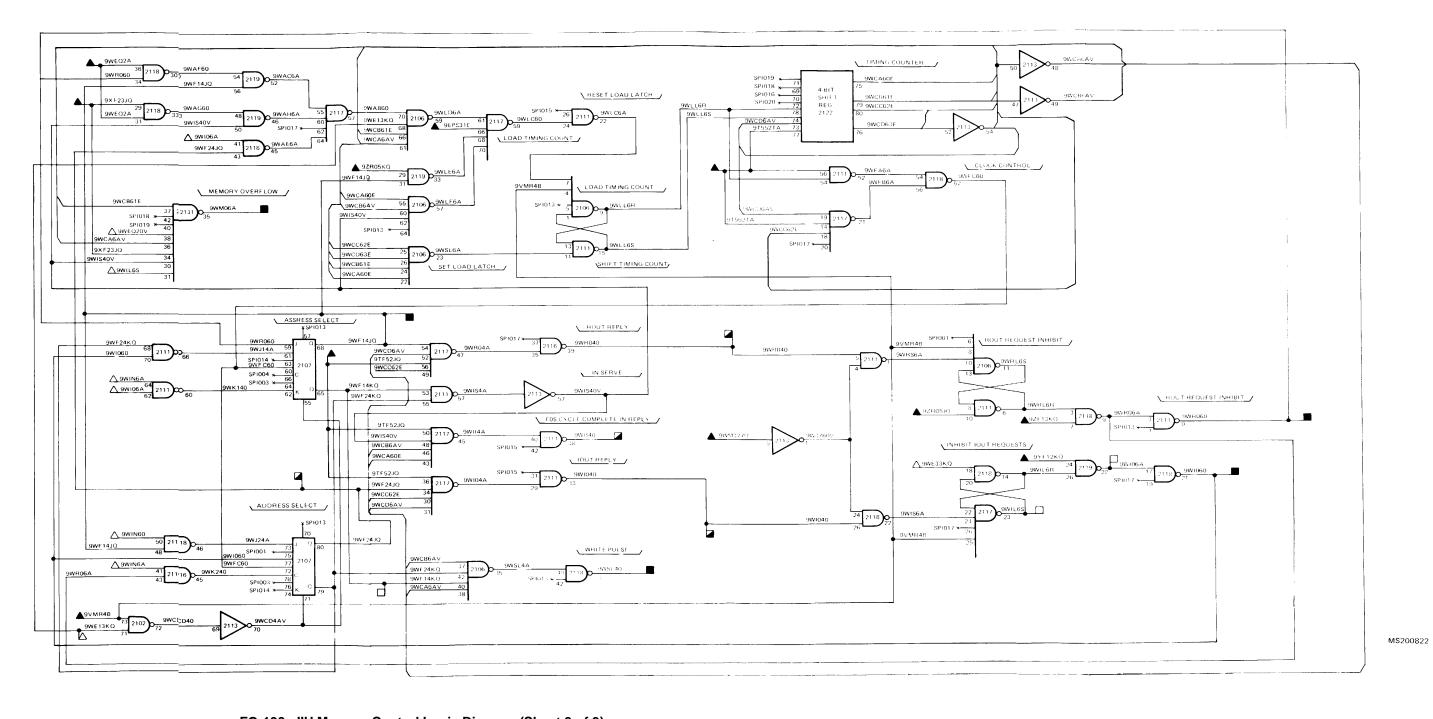


FO-199. IIU Memory Control Logic Diagram (Sheet 2 of 3)

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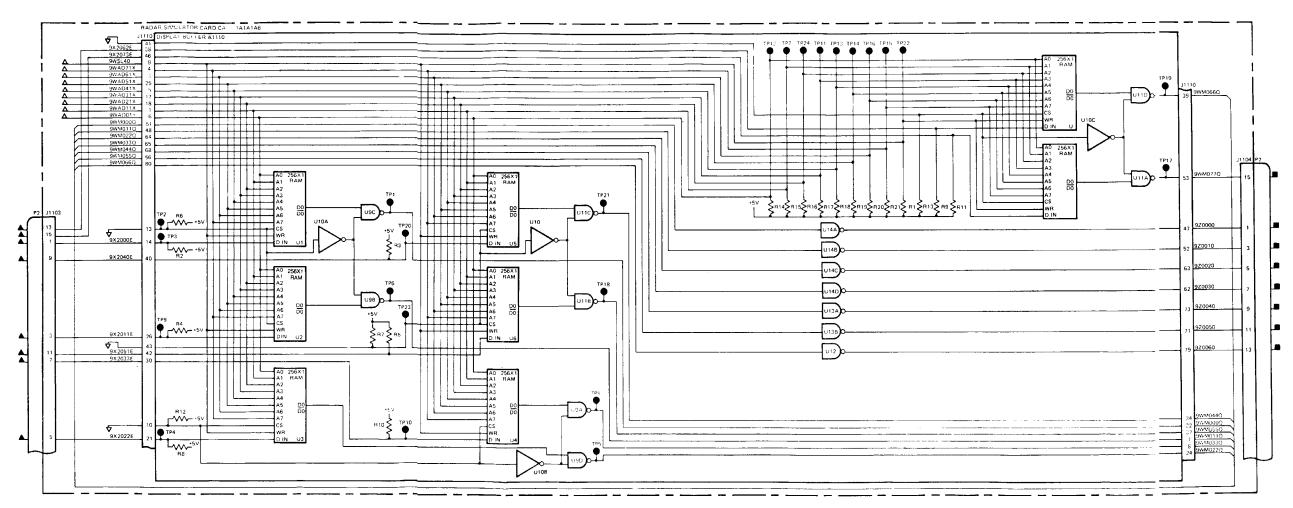
INPUT		OUTPL	JT		
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT	TION	
9EPS31E	18802	9 W F 14 J Q	20502		
9TF52JQ	20202	9 W F 2 4 J Q	20502		
9T552TA	20202	9WII40	19501		
9 V M R 4 B	19600	9WI040	20100		
9WM377Q	20005	9WI060	20502		
9 X F 2 3 J Q	19501	9 W M O 6 A	11900,	26803,	27302
9 Y F 1 2 K Q	20100	9WR040	20300		
9 Z F 1 3 K Q	20300	9WR060	20502		
9 Z R O 5 J Q	19700	9WSL40	20005,	20502,	26803
9 Z R O 5 K Q	19700			ŕ	

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FO-199. IIU Memory Control Logic Diagram (Sheet 3 of 3)

INP	UT	OUTP	u T		
SIGNAL	SOURCE	SIGNAL	DESTINA	TION	
210NAC	10-24	210NAL			
9x2000E 9x2000E 9x2011E 9x2011E 9x2022E 9x2022E 9x2033E	27401 19502 27401 19502 27401	9WM077Q 9Z0000 9Z0010 9Z0020 9Z0030 9Z0040 9Z0050	20100, 20100, 20100, 20100, 20100,	26803 20300, 20300, 20300, 20300, 20300, 20300,	2680 2680 2680 2680 2680
9x2033E 9x2040E 9x2040E 9x2051E 9x2051E 9x2062E 9x2062E 9x2073E 9x2073E	19502 27401 19502 27401 19502 27401 19502	920060	20100,	20300,	2680



Change 3 FO-200. IIU Target Start RAM Logic Diagram (Sheet 1 of 5)

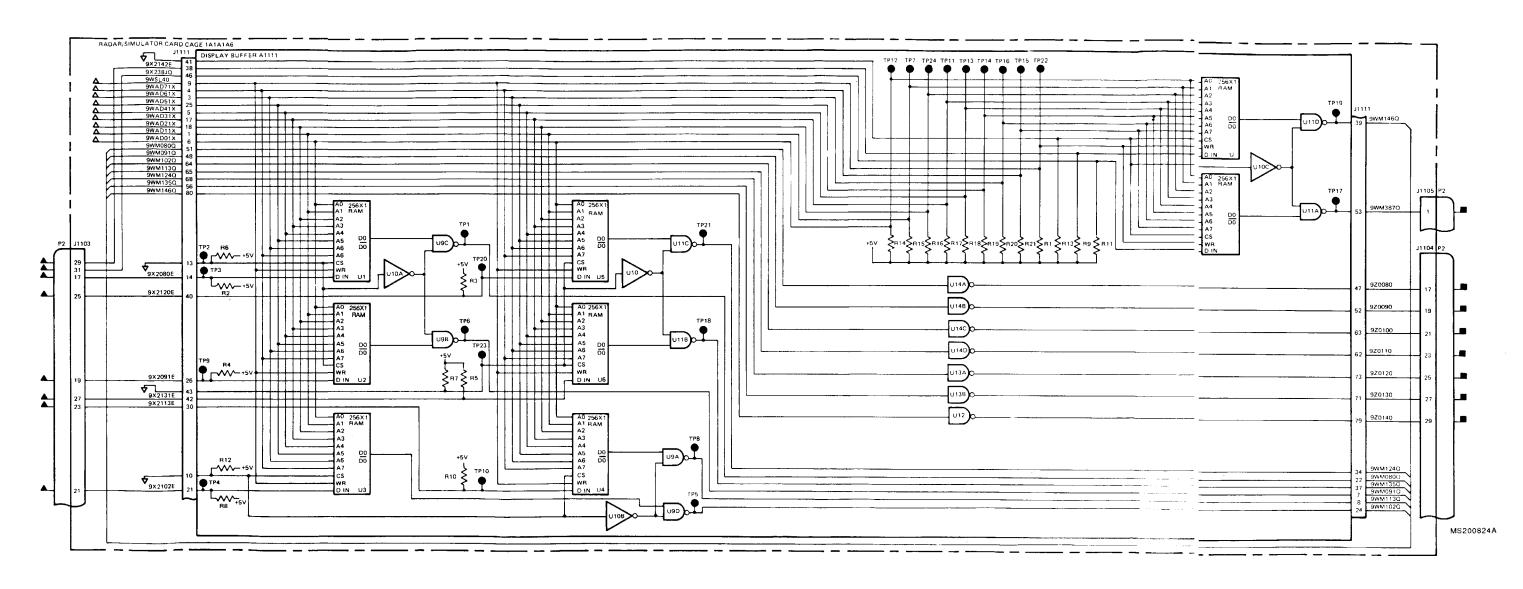
TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

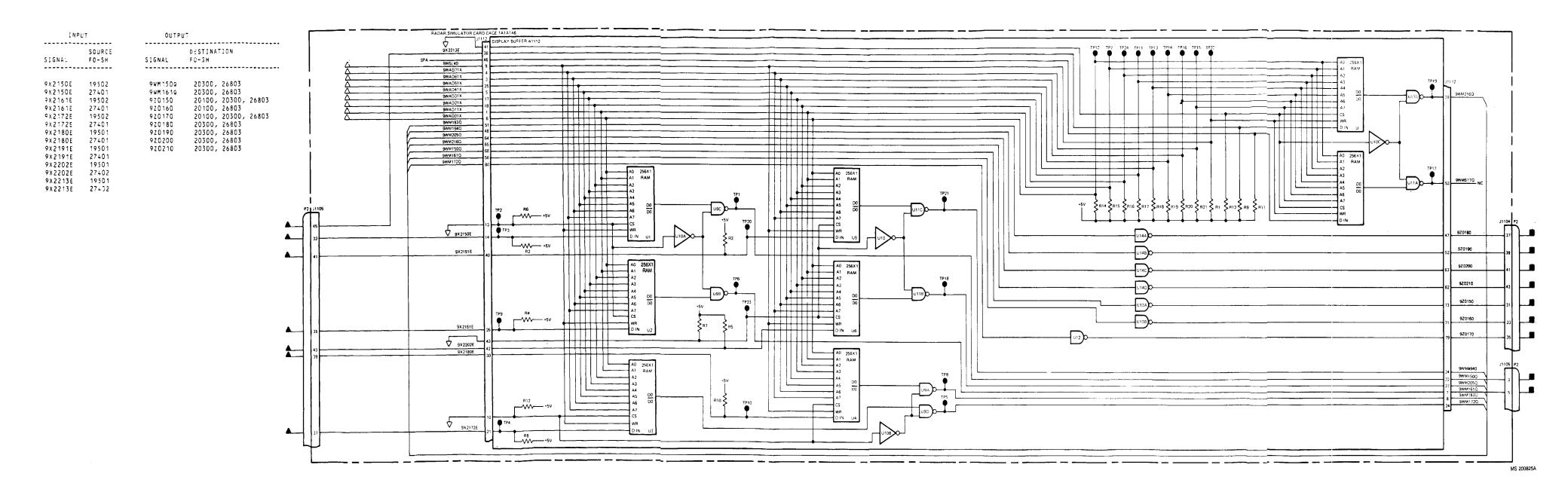
- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RSU (1A1A1A6.)
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- . REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

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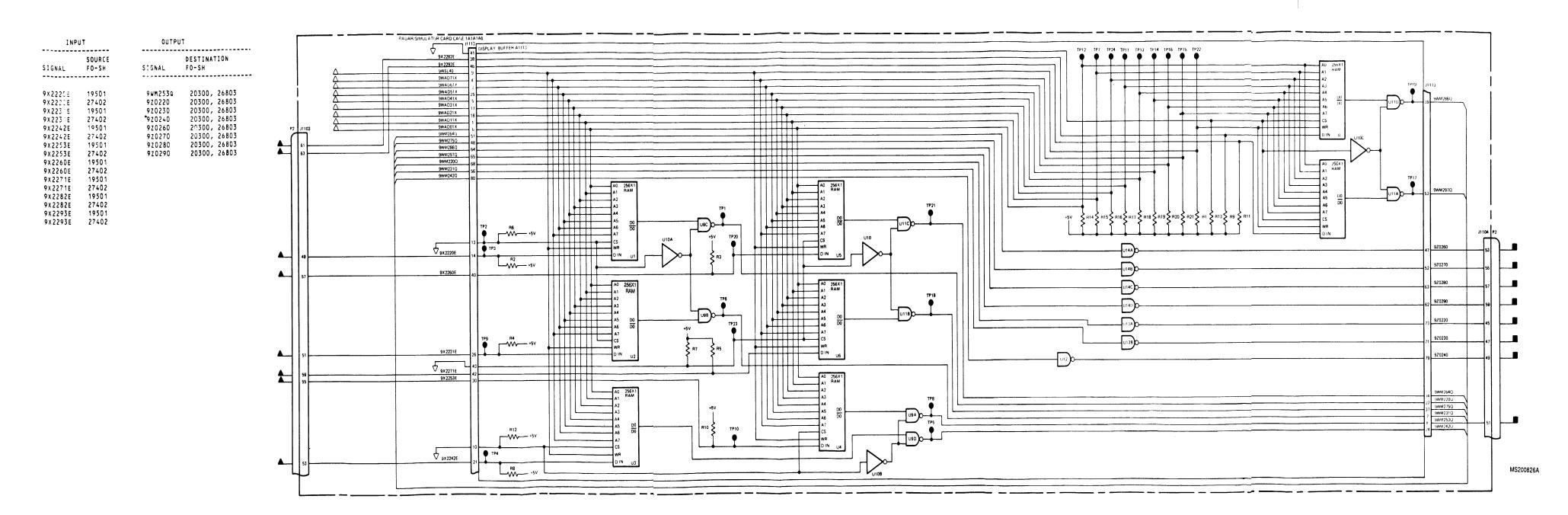
INP	UT	06TP	υT		
SIGNAL	SOURCE FO-SH		DESTINA	TION	
9x2G80E 9x2O80E 9x2O91E 9x2O91E 9x2102E 9x2113E 9x2113E 9x2113E 9x2120E 9x2131E 9x2131E 9x2131E 9x2142E 9x238JQ	27401 19502 27401 19502 27401 19502 27401 19502 27401 19502 27401 19502 27401 19502 27401	9WM387Q 9Z0080 9Z0090 9Z0100 9Z0110 9Z0120 9Z0130 9Z0140	20100, 20100, 20100, 20100, 20100, 20100,	26803 20300, 20300, 20300, 20300, 20300, 20300,	26803 26803 26803 26803 26803



Change 3 FO-200. IIU Target Start RAM Logic Diagram (Sheet 2 of 5)

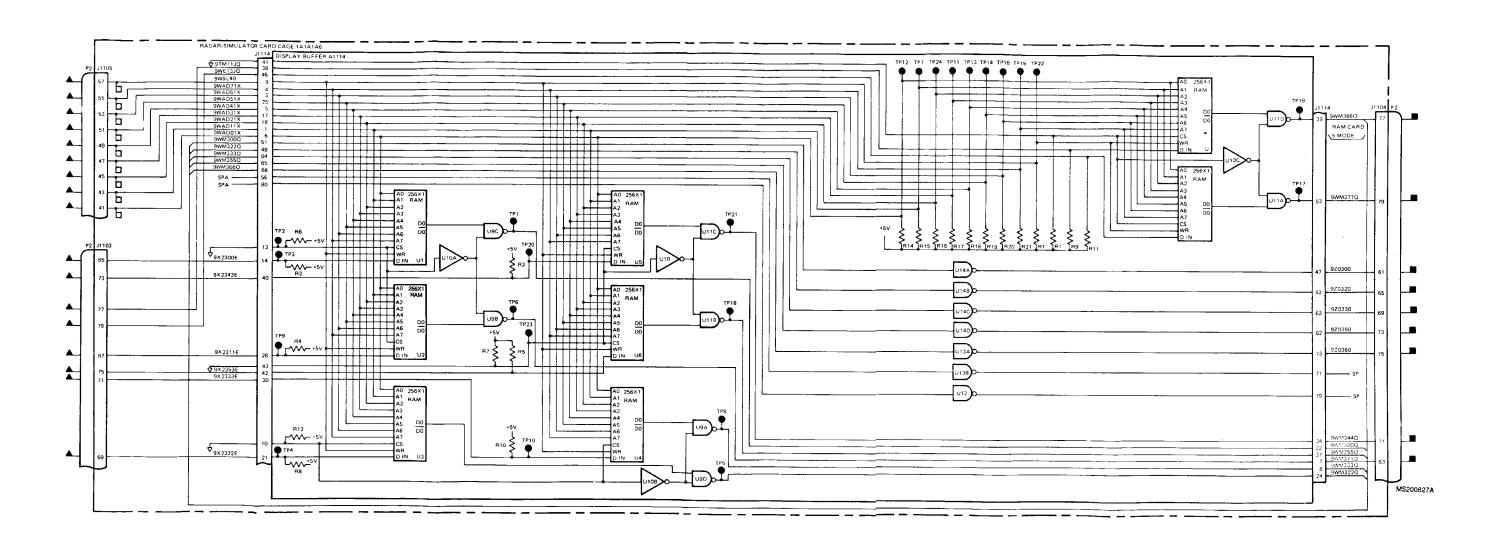


Change 3 FO-200. IIU Target Start RAM Logic Diagram (Sheet 3 of 5)

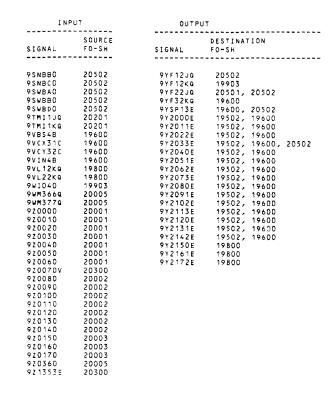


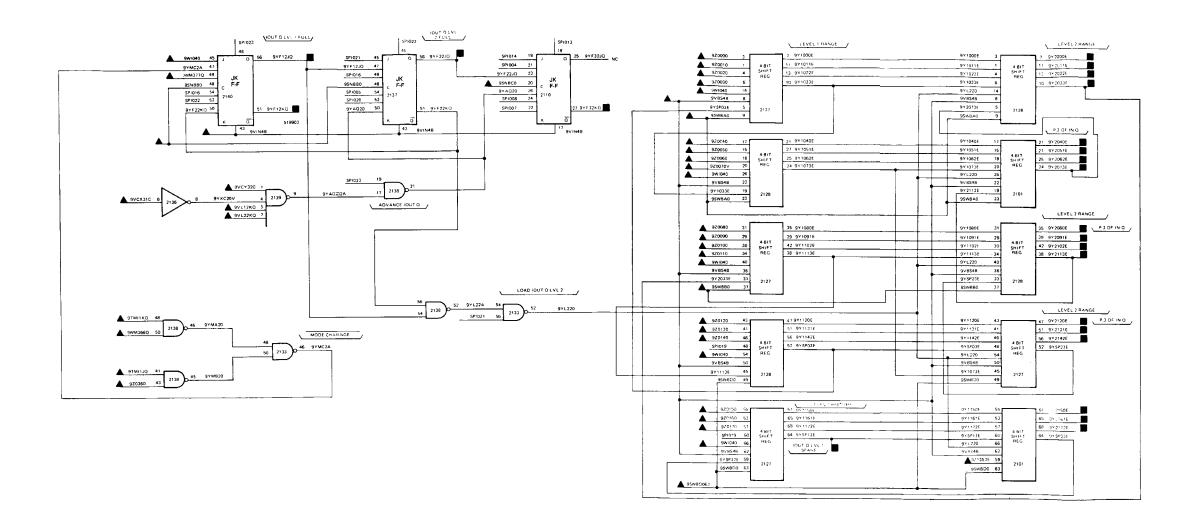
Change 3 FO-200. IIU Target Start RAM Logic Diagram (Sheet 4 of 5)

INP	UT	OUTF.	OUTFUT			
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINAT	TION		
9 W A D Z 1 X 9 W A D Z 1 X 9 W A D D A 1 X 9 W A D D A 1 X 9 W A D D A 1 X 9 W E 1 3 J Q 9 W E 1 3 J Q 9 W E 1 3 J Q 9 W E 2 3 0 D E 9 X 2 3 3 1 D E 9 X 2 3 3 1 E 9 X 2 3 3 2 E 9 X 2 3 3 3 E 9 X 2 3 4 3 E	19902 19902 19902 19902 19902 19902 19902 19902 19901 27402	9 WM311Q 9 WM366Q 9 WM366Q 9 WM377Q 920300 920320 920330 920350 920360	20300, 20100, 19903, 20300, 20300, 20300,	26803 26803 20100, 26803 26803 26803 26803	20300,	26803



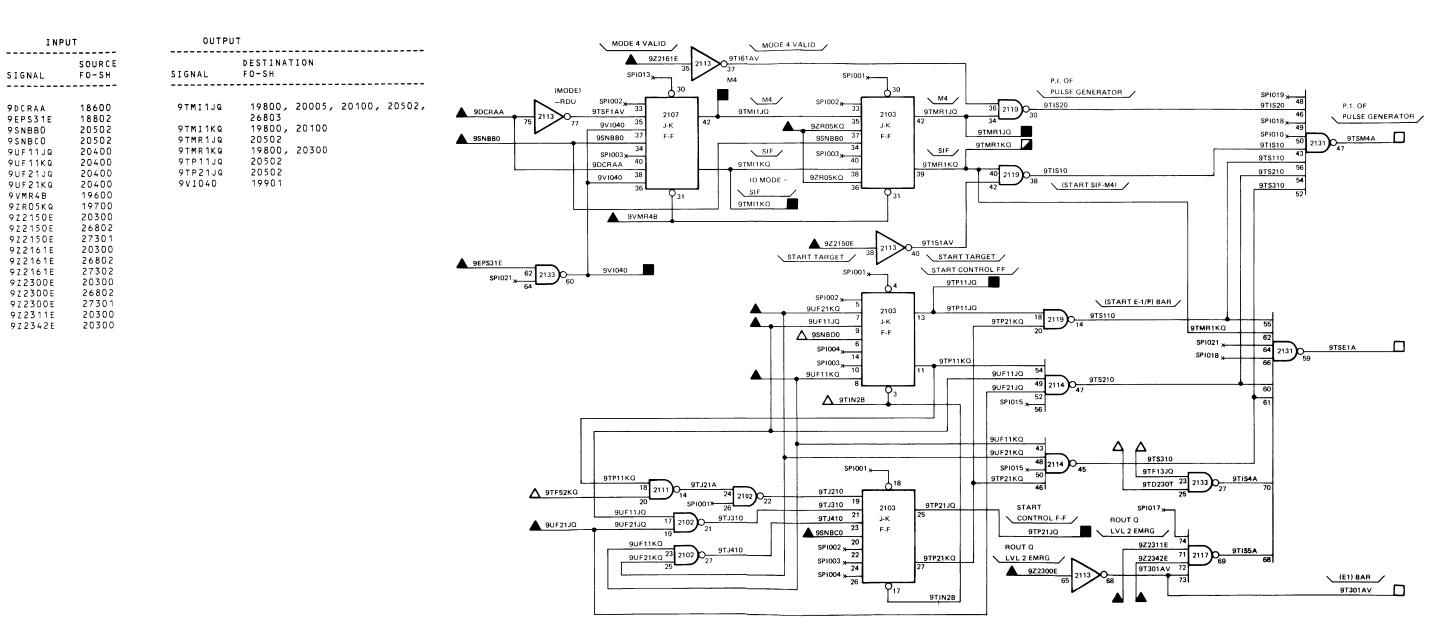
Change 3 FO-200. IIU Target Start RAM Logic Diagram (Sheet 5 of 5)





Change 3 FO-201. IIU IFF Output Queue Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A1123, A1139, A1149 AND A1227



INPUT

SIGNAL

9 D C R A A

9EPS31E

9SNBB0

9SNBC0

9UF11JQ

9UF11KQ

9UF21JQ

9UF21KQ

9ZRO5KQ

9 Z 2 1 5 O E

9 Z 2 1 5 0 E

9 Z 2 1 5 O E

9 Z 2 1 6 1 E

9 Z 2 1 6 1 E

9 Z 2 1 6 1 E

9 Z 2 3 0 0 E

9 Z 2 3 0 0 E

9 Z 2 3 0 0 E

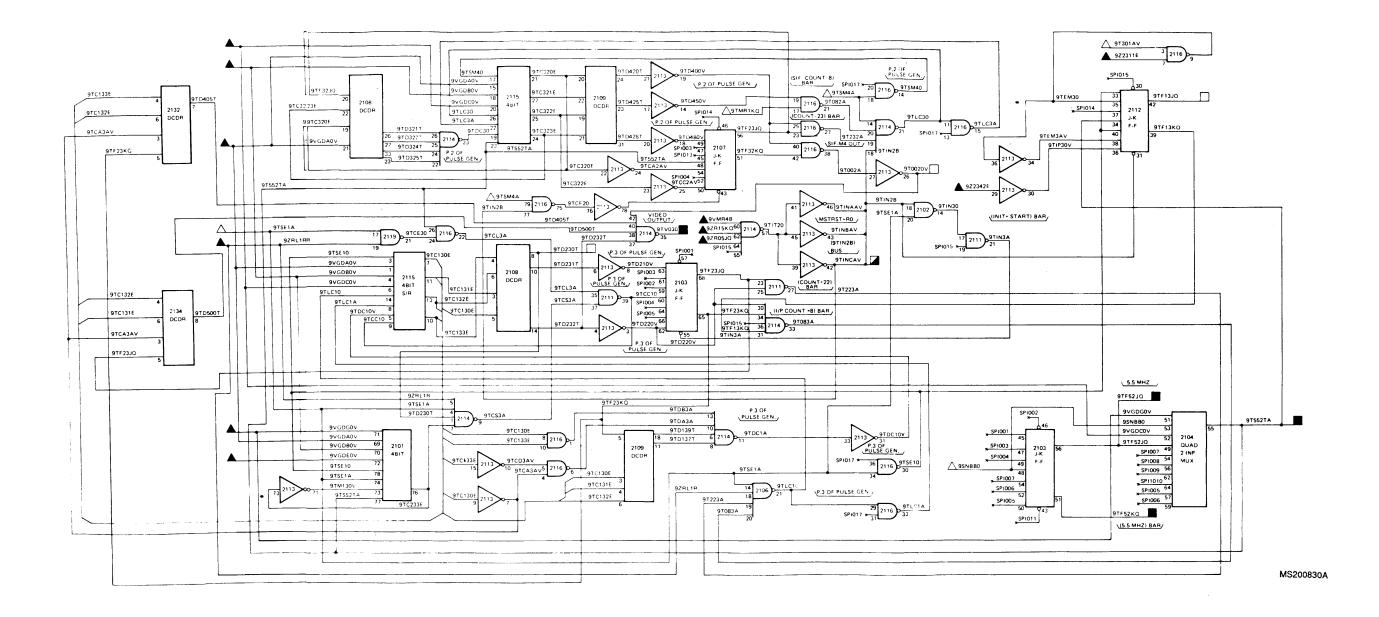
9 Z 2 3 1 1 E

9 V M R 4 B

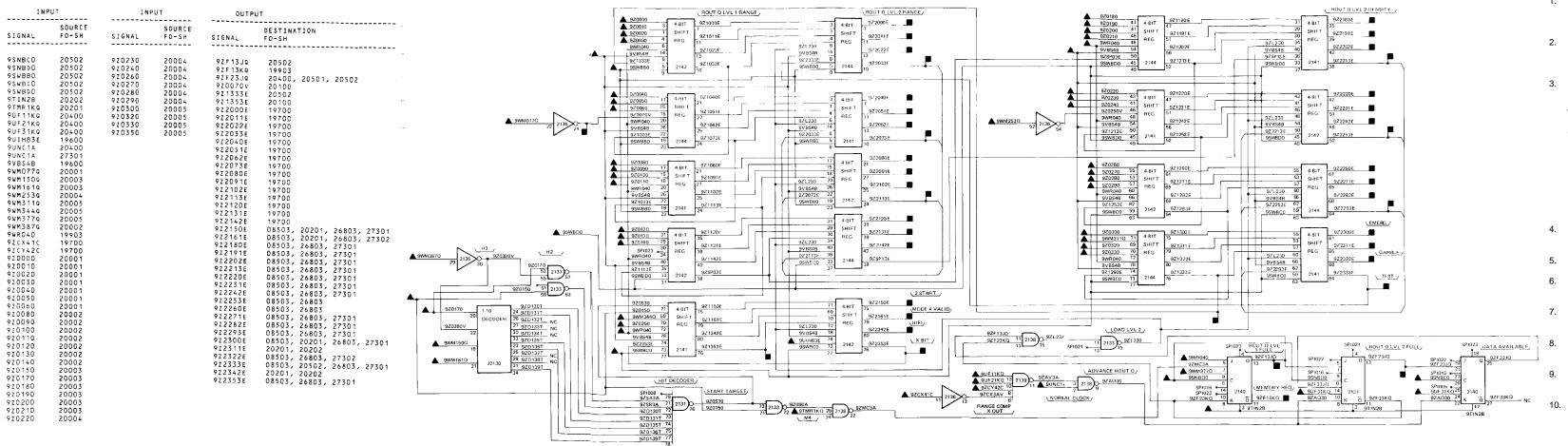
Change 3 FO-202. IIU Pulse Generator Logic Diagram (Sheet 1 of 2)

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1. RIU BAY 1 CARD CAGE (1A1A1A4.)
- REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
 - INDICATES INPUT FROM THE SAME FIGURE
 - INDICATES OUTPUT TO ANOTHER FIGURE
 - INDICATES OUTPUT TO THE SAME FIGURE
 - INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC
- REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - REFER TO TABLE 5-39 FOR CARD PART
 - REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332

INPUT		OUTP	J T
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
9 V G D A O V 9 V G D B O V 9 V G D C O V 9 V G D E O V 9 V G D E O V 9 V M R 4 B 9 Z R L 1 R 9 Z R O 5 J Q 9 Z Z 3 3 1 L E 9 Z 2 3 4 2 E	19502 19501 19700 20502 19502 19600 19700 19700 19700 20300	9TF52JQ 9TF52KQ 9TIN2B 9TV030 9T0020V 9T552TA	19903 20502 20300 14202, 20502, 26803 20502 19903



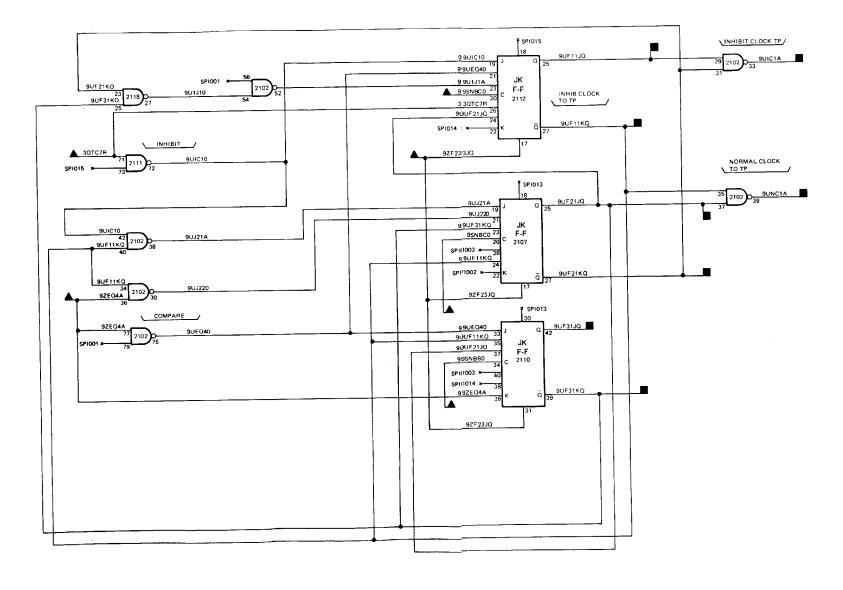
Change 3 FO-202. IIU Pulse Generator Logic Diagram (Sheet 2 of 2)



FO-203. IIU Radar Output Queue Logic Diagram

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
- ▲ INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - .. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - 3. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332.

INPUT		OUTPU	17
SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH
3QTC7R 3QTC7R 3QTC7R 9SNBBO 9SNBCO 9ZEQ4A 9ZF23JQ	08300 26803 27302 20502 20502 19700 20300	9UF11JQ 9UF11KQ 9UF21JQ 9UF21KQ 9UF31JQ 9UF31KQ 9UIC1A 9UNC1A	20201, 20502 20201, 20300 20201, 20300 20201, 20300 20502 20300 08300, 26803, 27301 08300, 08400, 20300, 20502, 26802, 26803, 27301



Change 3 FO-204. IIU Input/Output Control Logic Diagram

TM 9-1430-655-20-3-5

NOTES: UNLESS OTHERWISE SPECIFIED

- PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:

INDICATES INPUT FROM ANOTHER FIGURE

 Δ INDICATES INPUT FROM THE SAME FIGURE

INDICATES OUTPUT TO ANOTHER FIGURE

INDICATES OUTPUT TO THE SAME FIGURE

INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE

 REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX.

5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.

. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING .

7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.

8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.

 CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.

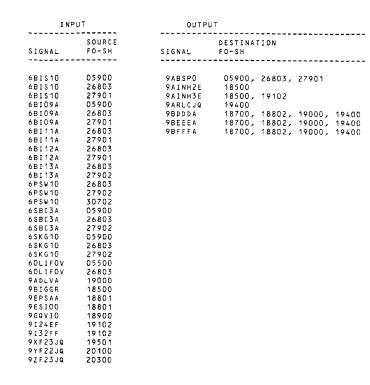
10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:

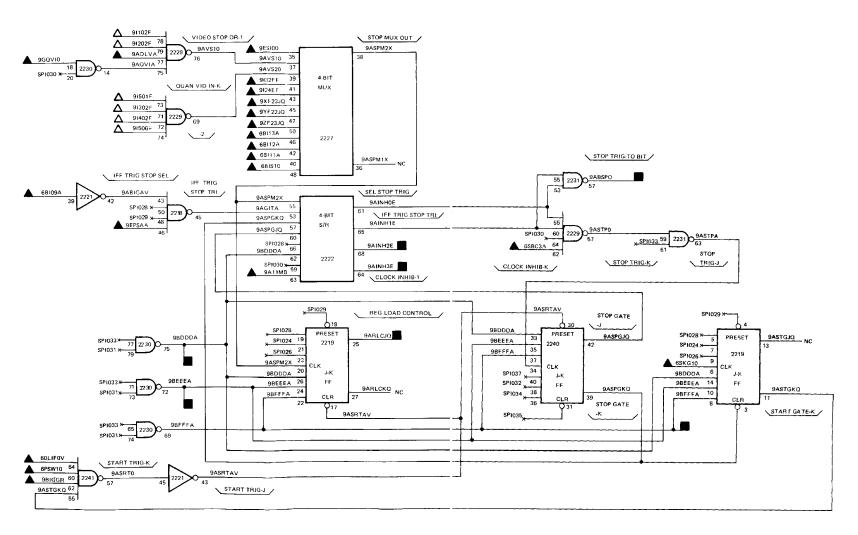
A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER

B. REFER TO TABLE 5-39 FOR CARD PART NUMBER.

C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS

11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332

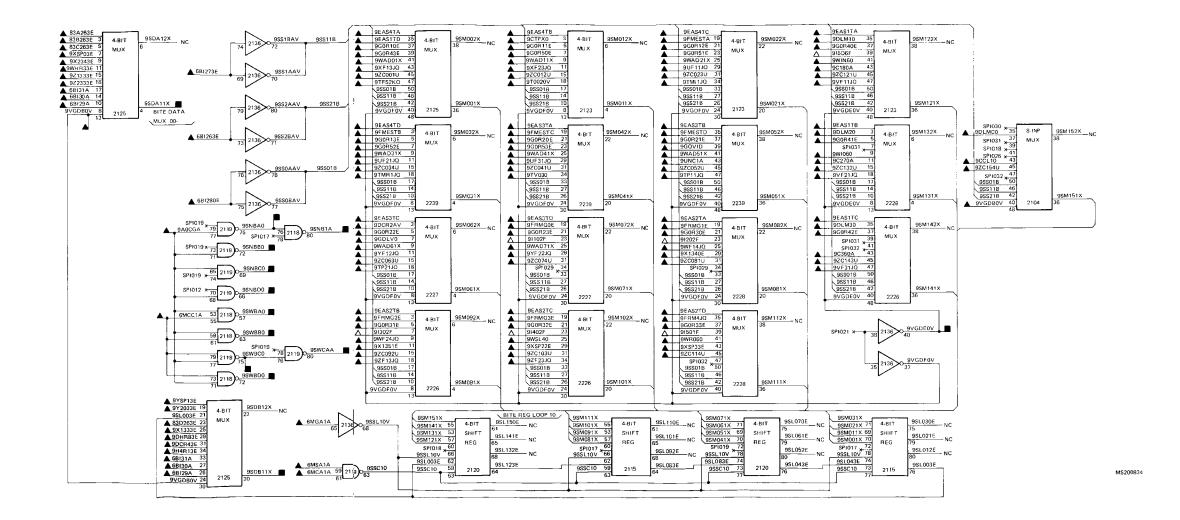




FO-205. IIU BITE Register and Control Logic Diagram (Sheet 1 of 2)

- 1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATIONS, PREFIX WITH APPLICABLE UNIT NUMBER AND ASSEMBLY DESIGNATION.
- 2. ALL CIRCUITS SHOWN ON THIS FIGURE ARE CONTAINED IN EQUIPMENT RACK 1.
 RIU BAY 1 CARD CAGE (1A1A1A4.)
- 3. REFERENCES ARE AS FOLLOWS:
 - INDICATES INPUT FROM ANOTHER FIGURE
- INDICATES OUTPUT TO ANOTHER FIGURE
- INDICATES OUTPUT TO THE SAME FIGURE
- INDICATES OUTPUT TO THE SAME AND ANOTHER FIGURE
- 4. REFER TO TABLE 5-1 FOR CARD LOCATION IN LOGIC DIAGRAM INDEX .
- 5. REFER TO TABLE 5-2 FOR KEY SIGNAL LOOK UP LISTING.
- 6. REFER TO CABLING DIAGRAM SECTION XII FOR UNIT TO UNIT SIGNAL CABLING.
- 7. REFER TO RIE POWER DISTRIBUTION DIAGRAMS FOR DC POWER AND GROUND CIRCUITS.
- 8. REFER TO SECTION II FOR CIRCUIT CARD CHIP FUNCTION DESIGNATIONS.
- 9. CIRCUIT SYMBOLS INCLUDE CARD LOCATION AND CIRCUIT CARD PIN NUMBERS.
- 10. TO DETERMINE CIRCUIT CARD PIN/TEST POINT PERFORM THE FOLLOWING:
 - A. FROM CIRCUIT SYMBOL NOTE CARD LOCATION AND CIRCUIT CARD PIN NUMBER
 - 8. REFER TO TABLE 5-39 FOR CARD PART NUMBER.
 - C. REFER TO TABLE 5-40 FOR CARD PIN/TEST POINT FOR MTS TESTABLE CARDS
- 11. SPIXXX INDICATES +5V PULLUP THROUGH RESISTOR CARDS A2217 AND A2332

INP	υT	INF	U T	INF		INP	UT	OUTP	UT 		
SIGNAL	SOURCE FO-SH	SIGNAL	SOURCE FO-SH	SIGNAL	SOUR C FO-SH	SIGNAL	SOURCE FO-SH	SIGNAL	DESTINATION FO-SH		
6B:262E	05300									, 27901	
	26803	90CR43E		9G0R12E 9G0R13E	19400	9 W I O 6 O	19903	95DB11X		, 27901	
	27901		18600		19400	9WR060	19903	95NBA0 95NBB0	19501, 19600		
	05300	9DLMCD	18700	9G0R21E	19400	9WSL40	19903	9 S N B B O	19800, 19901	, 20100,	20201
	26803	9 D I M 1 D	18700	9G0R22E	19400	9 X F 13 J G	19501		20400		
	27901	9 D L M 2 O 9 D L M 3 O	18700	9GDR23E	19400	9 X F 2 3 J Q	19501	9 S N B C O	19600, 19700	, 20100,	20201
	05300	9 D L M 3 O	18700	9G0R30E	19400	9 X S P O 3 E	19502		20300. 20400		
	26803	9EAS1TA	18801	9G0R31E	19400	9 X S P 2 2 E	19502	9SNBD0	19501, 19700	, 19901,	20300
6B1280E		9EAS1TB	18801	9GDR32E	19400	9 X S P 3 3 E	19502	9 S N B 1 A	19901		
6BI29A	26802	9EAS1TC	18801		19400	9 X 1333E	19501	9SWBA0	19501, 19502	, 19600,	19901
6BI29A	26802 26803		18801		19400	9 X 13 4 0 E	19502		20100		
6B129A	27901		18801	9G0R41E	19400	9 X 13 5 1 E	19502 19502	98WBB0	19501, 19502 19502, 19600 19502, 19600 19901	, 20100,	20300
	26803		18801	9G0R42E	19400	9 X 2 3 4 3 E	19502	9 S W B C O	19502, 19600	, 19800,	20300
6B130A	27901		18801	9G0R43E	19400	9×2343E	27402	9SWBD0	19502, 19600	, 20100,	20300
6BI31A	05300		18801	960R50E	19400	9 Y F 1 2 J Q	20100	9 S W C A A	19901		
6BI31A	05300 26802		18801	9G0R51E	19400	9 Y F 2 2 J Q	20100	9 V G D E D V	19902, 20202		
			18801	9G0R52E	19400	9YSP13E	20100				
6B131A	27901		18801	9G0R53E	19400	9 Y 2 O 3 3 E	20100				
6MC414	05600		18801		19400	92C001U	19700				
6MC414	26803		18801	9 T F 5 2 K G	20202		19700				
6MCA1A	27901		18801	9TMI1JQ	20201 20201	9 Z C O 2 3 U	19700				
6MCC1A	05600		18801	9TMR,1JG	20201	920034U	19700				
6MCC1A	26803		18801	9TP11JQ	20201	9 Z C O 4 1 U	19700				
6BI31A 6BI31A 6MCA1A 6MCA1A 6MCC1A 6MCC1A 6MCC1A 6MCC1A	27901		18700	9TP21JQ 9TV030	20201	9 Z C O 5 2 U	19700				
6MGA1A	05600	0.545635	18700	9TV030	20202	9 Z C O 6 3 U	19700				
6MGA1A	26803	9 FMESTC	18700	9T0020V	20202	9 Z C O 7 4 U	19700				
6MGA1A	27201	9 FMESTD	18700	9UF11JQ	20400	9 Z C O 8 1 U	19700				
6MGA1A 6MGA1A 6MGA1A 6MSA1A 6MSA1A	05600	9 F R M G D E	18700	9UF21JG	20400	9 Z C O 9 2 U	19700				
6MSA1A	26803	9 F R M G O E	26802	9UF31JQ	20400	9 Z C 103 U	19700				
6MSA1A	27201	9 F R M G O E	27302	9UNC1A	20400	92C114U	19700				
	18402	9 F R M G 1 E	18700	9 U N C 1 A	27301	9 Z C 12 1U	19700				
	28401	9 F R M G 1 E	26802	9UF31JQ 9UNC1A 9UNC1A 9VF11JQ	19800	9 Z C 13 Z U	19700				
83B263E	18402	9 F R M G 1 E	27302	9 V F 2 1 J Q	19800	9 Z C 143 U	19700				
83B263E	28401	9FRMG2E	18700		19800	9 Z C 15 4 U	19700				
830263E	18403	9FRMG2E	26802	9 V G D B O V	19501	9 Z F 13 J Q	20300				
83C263E	28401	9 F R M G 2 E	27302		19902	9 Z F 2 3 J Q	20300				
830263E	18404	9FRMG3E	18700	9WAD11X	19902	9 Z 1 3 3 3 E	20300				
830263E	28401	9FRMG3E	26802	9WAD21X	19902	922333E	20300				
	18500	9 F R M G 3 E	27302	9WAD31X	19902	9 Z 2 3 3 3 E	26802				
	20702	O F D M / I D	18700	9WAD41X	19902	9 Z 2 3 3 3 E	27301				
900110 900110 901700 901804 902704 902704 903604	29801	9FRM4JQ	26802	9WAD51X	19902						
9CTPXD	27801	9 F R M 4 J Q	27302	9WAD61X	19902						
0 (18 A	29801	960LV0	19000	9WAD71X	19902						
0.00704	26803	9GQVIO	18900	9WF14JQ	19903						
0.02704	29801	9G0R10E	19400	9WF24JQ	19903						
0.7400	29801	960R11E	19400	9WHR33E	19961						
403004	27001	JOHNIE	17400	/ H 11 11 2 2 E	.,,,,,,,						



FO-205. IIU BITE Register and Control Logic Diagram (Sheet 2 of 2)

By	Order	of	the	Secretary	of /	the	Army	/ :
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JOHN A. WICKHAM, JR. General, United States Army Chief of Staff

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THE METRIC SYSTEM AND EQUIVALENTS

'NEAR MEASURE

Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches

1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches

1 Kilometer = 1000 Meters = 0.621 Miles

YEIGHTS

Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces

1 Kilogram = 1000 Grams = 2.2 lb.

1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces

1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches

1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet

1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

TEMPERATURE

 $5/9(^{\circ}F - 32) = ^{\circ}C$

212° Fahrenheit is evuivalent to 100° Celsius

90° Fahrenheit is equivalent to 32.2° Celsius

32° Fahrenheit is equivalent to 0° Celsius

 $9/5C^{\circ} + 32 = {\circ}F$

APPROXIMATE CONVERSION FACTORS

TO CHANGE	10	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	
Fluid Ounces	Milliliters	
nts	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	
Cubic Meters	Cubic Feet	
Cubic Meters	Cubic Yards	
Milliliters	Fluid Ounces	
Liters	Pints	2.113
Liters	Quarts	1.057
`ers	Gallons	0.264
.ms	Ounces	0.035
.ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
ometers per Liter	Miles per Gallon	2.354
meters per Hour	Miles per Hour	0.621



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